

Spiritual wellbeing and the human-nature relationship: An exploration of the spiritual wellbeing experiences of home and community gardeners.

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Abstract

In recent years, wellbeing has emerged as a way to describe the holistic health of a population. This thesis explores the premise that spiritual wellbeing, an often neglected and poorly understood dimension of the wellbeing spectrum, may offer a complementary and cohesive element to physical, mental and social wellbeing. Nature-based activities hold promise for developing spiritual wellbeing, but prior research has focussed primarily on wilderness settings. Such spaces are increasingly rare and for individuals living in urbanised areas it is of equal importance to identify the spiritual wellbeing benefits from nearby and everyday nature spaces. As accessible nature spaces, gardens and gardening activity provide an often undervalued opportunity through which individuals can engage with local nature. Gardeners may therefore be able to offer a unique insight into the role that interaction with nature may play in spiritual wellbeing.

This study therefore focuses on how spiritual wellbeing may be enhanced and developed through interaction with nature in the context of urban gardens. The study consists of two phases: Phase One focussed on community gardeners and was used to scope the topic and methodologies; Phase Two used semi-structured interviews with 25 gardeners to explore how spiritual wellbeing related to their gardening experiences. Thematic analysis of the data revealed that in the context of gardening, spiritual wellbeing is supported and developed through four key themes of: Contribution, Connection, Awareness, and Being Self, as expressed through a meaningful relationship with An-Other.

Previous spiritual wellbeing studies have highlighted the concept of a relationship with the 'Other' and wellbeing models often cite *human-human* relationships as important in developing wellbeing. Findings from the study suggest that interaction with nature, through the partnership activity of gardening, provides a *human-nature* relationship that may offer equivalent benefits in developing spiritual wellbeing. The findings may offer a novel approach to help address contemporary wellbeing issues, whilst also adding a new significance to the urban garden.

Publications arising from this thesis

The following paper relates to the pilot study undertaken in Phase One and outlined in chapter 3 which was published in a peer-reviewed journal prior to thesis submission.

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Abbreviations and Acronyms

CLG - Communities and Local Government

CNS – The Connectedness to Nature Scale

DEFRA – Department for Environment, Food and Rural Affairs

DESA – Department of Economic and Social Affairs

DMU – De Montfort University

ESRC – Economic Social and Research Council

NEF – New Economics Foundation

ONS – Office for National Statistics

SpWB – Spiritual Wellbeing

UK – United Kingdom

UN – United Nations

WHO – World Health Organisation

Chapter 1: Introduction

'I get chronic eczema and the dermatologist said no more gardening...I was absolutely distraught, I realised I couldn't exist without the garden...then I thought she's only seeing the physical, I have to balance the psychological and the spiritual, so I made it work...without the garden I would not have survived it's as strong as that' (Participant 21)

This study explores how spiritual wellbeing may be experienced and enhanced through interaction with nature. The project brings together a range of research from areas of inquiry such as spiritual wellbeing, gardening, and the nature interaction-wellbeing relationship. Using gardening as a nature interaction activity and gardeners as the participant sample, the study aims to explore the ways in which individuals conceptualise and experience spiritual wellbeing. This chapter provides a rationale for the study and a brief overview of the research approach taken. The chapter outlines the specific focus and objectives for the study followed by a description of the research approach and concludes with an overview of the style and layout of the thesis.

1.1 Background to study

In many Western societies the primary concerns of sustenance, shelter and healthcare are adequately addressed for the majority of the population. Progress in medicine has increased life expectancy, whilst minimum and living wages are intended to reduce poverty and improve living standards. Despite these developments, an increasing number of individuals report loneliness, depression and poor quality of life (ONS, 2015b). Wellbeing is often used as a term to reflect quality of life beyond the meeting of basic needs. Developing individual wellbeing may help to address these issues by supporting individual physical and mental health; such support ranges from lowering the risk of some diseases through to increasing practices of good health behaviours (De Neve et al., 2013). In contemporary societies the perceived importance of the concept of wellbeing has risen dramatically, becoming a central political and societal

concern (ONS, 2015; UN, 2012). As reflective of a healthy population, wellbeing is increasingly considered a key factor of a flourishing society and an indicator of progress (Shah & Marks, 2004; Huppert & So, 2013) and as such in the UK wellbeing has become enshrined in policy and measured by government (ONS, 2015b).

Whilst wellbeing may be supportive of physical and mental health it is a much wider concept that involves a number of dimensions that may be developed over a lifespan (Scott, 2012; Dodge et al., 2012). Current use of the term wellbeing is also wide scoping, focusing on the condition of an individual or a group and measured in numerous ways. Wellbeing can be measured subjectively, as the UK government does to compile wellbeing statistics by asking individuals personally 'how they think and feel about their lives' (DH, 2014 p.6) or more objectively, by focusing on overall levels of population health measured through rates of illness or injury. Whilst health measures are part of wellbeing, it primarily refers to the non-medical aspects of health and is often linked with quality of life and individual life satisfaction. Issues of health and wellbeing are however, considered hand in hand, and as such, wellbeing is also seen as a marker of good health (Ryff, 2004). Increasing one's individual wellbeing is frequently promoted and considered achievable through engagement in a range of everyday activities and environments, e.g. walking in nature or volunteering (ONS, 2015; NEF, 2008).

Wellbeing as a concept consists of multiple dimensions which are typically categorised as physical, mental and social (WHO, 1998). An additional, although less frequently discussed aspect of wellbeing is the spiritual (WHO, 1948; Ellison, 1983). This is problematic as spiritual wellbeing conceptually appears to be a fundamental part of the wellbeing spectrum and a lack of research in this field means only a partial understanding of wellbeing can be achieved. At both a micro and macro level, developing a more complete understanding of how overall wellbeing can be supported is only possible when all dimensions including the role of spiritual wellbeing are understood. The neglect of the spiritual in contemporary discussions of wellbeing is perhaps due to the difficulties in defining and conceptualising its role in the wellbeing

spectrum and the phrase itself being used to link a range of concepts such as spiritual health and spiritual wellness.

A rise in and widening of the use of the term 'spiritual' has seen a much more personal interpretation develop with it often meaning 'whatever the speaker wants it to mean' (Rowe, 2001 para 20). Additionally, use of the term 'spirituality' is often present in discussions of a range of experiences such as transcendent moments or aspects of the supernatural or divine (Casey, 2009). Consequently 'spiritual' wellbeing may be a confusing and contested concept for many individuals in secular western societies. This study thus endeavours to reflect contemporary interpretations of 'spiritual' as inclusive of multiple meanings. To explore this understanding and bring valuable data to this field of inquiry, this study asks the individual participants to personally interpret and define spiritual wellbeing.

Given the likely personalised nature and the wide range of conceptualisations within current discussion, spiritual wellbeing stands apart from the more clear, albeit complex, common understandings of physical, mental and social wellbeing. Within discussions of wellbeing, it is considered by some to be both an element of wellbeing and also an overall linking aspect of wellbeing 'in which the physical, mental, emotional, social and vocational dimensions interact with one another' (Bensley, 1991, p.287). Heintzman (1999) has argued that it is 'an integrative component and not just an elementalistic component of wellness' (p.2). Despite acknowledgement as a factor in holistic health and wellbeing (WHO, 1948), spiritual wellbeing has received little research attention in comparison with other wellbeing dimensions (Linton et al., 2016). Research around this strand of wellbeing could facilitate greater recognition of its role in an individual's life and help identify activities and experiences that support its development. Such research is also important in helping policymakers conceptualise and support spiritual wellbeing at a societal level, thus widening and strengthening the overall concept of wellbeing within the population.

Research that has explored spiritual wellbeing has tended to focus on the role of faith and spirituality during life crises. However, researchers in the field of leisure and

spiritual wellbeing do consider the concept in non-religious settings. Findings from studies in this field undertaken with the general public suggest that nature-based leisure activities may play a role in spiritual wellbeing (Heintzman, 2000). Prior research in this field however tends to focus on peak experiences or wilderness based nature encounters (Fredrickson & Anderson, 1999). Such experiences are inaccessible for many people and as such there is value in identifying the potential spiritual wellbeing benefits of nearby or urban nature spaces, i.e. community and home gardens.

1.2 Study Overview

This study focuses on gardening as a nature-based activity and explores the role it plays in spiritual wellbeing.

Gardening as a leisure activity has a long history; from ancient times gardens have been identified as places of value, providing medicines, respite and a place to engage with nature (Francis & Hester, 1990). Gardens are still valued by many and with half of the world's population now living in urban areas (DESA, 2009) a garden offers one of the few opportunities to access nature close to home.

Previous studies about gardening have focussed on individual physical and mental health benefits such as addressing poor nutrition (Twiss et al., 2003) and reducing stress (Hawkins et al., 2011; Van Den Berg et al., 2011). An increase in community and school gardening has highlighted its role in addressing additional contemporary societal concerns such as food sustainability and community development (Armstrong, 2000; Turner, 2011). The urban garden has, however, rarely been investigated in terms of its spiritual wellbeing benefits since its proximity to the home is often perceived as lacking the mystery, wonder and awe of wilder landscapes (Bhatti et al., 2014). Yet, unlike other leisure activities that take place in nature, such as walking, where humans have minimal active engagement with the natural environment, gardening requires humans to work closely with nature. This study thus focuses attention on examining the potential for a partnership to develop between the gardener and nature with exploration of the effect this relationship might have on spiritual wellbeing.

Several fields of inquiry provided conceptual lenses through which the study has been developed and are explored in greater depth in the literature review. Positive psychology (Seligman, 2004) has helped to structure and focus the study as one that is centred on life enhancement rather than addressing deficits (e.g. supporting individuals in identifying and utilising their strengths rather than focusing on weaknesses). This is reflected in the focus of the study which is centred on the beneficial aspects of gardening as opposed to the negative aspects that may be experienced by some gardeners. Positive psychology also identifies how the positive aspects of our lives such as positive emotions may have value beyond their immediate effect (Fredrickson, 2013). The study utilises this approach, seeking to identify how benefits from gardening may be felt more widely beyond physical health and mental respite into the dimension of spiritual wellbeing. The Biophilia Hypothesis (Wilson, 1984) has also helped shape the understanding of the depth of the human-nature relationship and the benefits such a relationship offers. The conceptualisation of spiritual wellbeing has been influenced by work in the field of leisure and nature (Heintzman, 2009), whilst the overall discussion of wellbeing has been informed by policy surrounding the area from think tanks such as the New Economics Foundation (NEF, 2008).

Researcher reflection – As the project's focus shifted so did my role within it. The change of direction more clearly delineated my role as one of researcher as opposed to project manager. This was useful and allowed for a new relationship between myself and the participants to develop beyond the practical nature of running the project.

1.3 Research Aim and Objectives

This study was initially conceived as a project entitled 'Dig for Health' and was partially funded by De Montfort University. The remit of the project was based around evaluating a community food growing and environmental project for individual and community sustainability and was focused around the role of community gardens.

However, after a number of site visits to various potential partner gardens it became apparent that the project was unfeasible in its proposed format due to low participant numbers. Based on the literature review and discussions within the supervisory team the project refocused and sought instead to look at spiritual wellbeing which was highlighted as a gap in the literature and home and community gardeners to ensure a reasonable level of participant uptake. The following research aim and objectives are based around a review of the literature and seek to explore this new direction.

1.3.1 Research Aim

Explore how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners.

1.3.2 Research Objectives

1. Understand whether gardeners demonstrate a connection with nature.
2. Investigate meanings of spiritual wellbeing and identify some of its key features.
3. Explore gardeners' understanding and experiences of spiritual wellbeing.
4. Examine whether the features that reflect spiritual wellbeing (as defined by participants and evident in the literature) are present in or developed through gardening.

The objectives that support the research aim are informed by the literature review and as such are discussed further in Chapter 2 alongside some reflective considerations.

1.4 Research Approach and Methods

The study incorporated an inductive iterative strategy seeking to build a greater understanding of the gardening experience. Data were collected utilising primarily qualitative methods, via semi-structured interviews with a small amount of quantitative data also collected in the early stages. The overall approach to the project has been iterative in that it has used the developing findings to steer additional data collection and the overall analysis processes of the project.

The study undertook research over a two year period with both community and individual gardeners across the UK and divided into two phases, with the first being an initial scoping phase. Phase One collected qualitative interview and quantitative survey data from nine faith-based primarily community gardeners. These gardeners are identified as voluntarily contributing to a garden space provided for communal use; they do not personally own the land and garden collectively with little or no individual responsibility. Phase Two offered the primary focus and comprised of semi-structured interviews with 25 individual primarily home gardeners irrespective of their religious beliefs. Home gardeners are identified as independent, often working alone and gardening a piece of land for which they are primarily responsible; frequently they were owners of the land on which the garden was placed. Descriptive statistics form the basis for the analysis of the quantitative data from Phase One, whilst the transcribed interview data from both phases were analysed using thematic analysis.

1.5 Thesis Layout

The thesis is structured into six chapters which include an organisational element to clearly illustrate the iterative and progressive approach taken. The chapters following this introduction are summarised below:

Chapter 2: Literature Review

This chapter explores the fields of wellbeing, spiritual wellbeing, nature interaction and gardening to explore how interaction with nature through gardening may enhance spiritual wellbeing experiences. This chapter also includes an overview of the framework of positive psychology which provides a conceptual lens throughout the thesis. The chapter concludes by outlining the gaps identified within the literature alongside the proposed objectives for this study.

Chapter 3: Research Approach

This chapter provides an overview of the overall research approach taken. The chapter outlines the overall research strategy and design and provides a summary of the

analysis processes undertaken. The chapter concludes by giving an overview of the ethical procedures and a consideration of the validity of the methodologies chosen.

Chapter 4: Faith-based community gardeners' understanding and experiences of spiritual wellbeing – Phase One

This chapter outlines the objectives for Phase One, the proposed sample of gardeners of faith and the methodologies employed. The chapter outlines the data analysis process and a discussion of the findings. The chapter concludes by providing some reflective considerations around the research process and considering how Phase One can support and develop Phase Two of the study.

Chapter 5: Home gardeners' understanding and experiences of spiritual wellbeing - Phase Two

This chapter provides an outline of the data collection methods and analysis processes undertaken to address the Phase Two objectives. The chapter provides a detailed overview and discussion of the findings, outlining a range of key themes identified as being reflective of spiritual wellbeing. The chapter concludes by considering the outlying and additional data collected, and provides an examination of the counter perspectives this data provides.

Chapter 6 Discussion and Synthesis

This final chapter brings the work of phases one and two together and highlights the differences, commonalities and overarching themes. The chapter summarises the key findings from each phase and reflects on the research aim and objectives. The chapter discusses the policy, practical and theoretical implications of the research alongside its limitations and concludes by highlighting potential areas for future research.

Researcher Reflections

In support of the iterative and reflective nature of the project, the thesis includes a series of 'researcher reflections' that are included as text boxes running alongside the main body of text. These reflections have been taken directly from the researcher diary and have been included to reveal the real-time research journey behind what, like any piece of social research, was not a straightforward linear process.

Chapter 2: Literature Review

This review will discuss literature surrounding the areas of inquiry that have informed this study, and will include: wellbeing, moving on to the concept of spiritual wellbeing; the nature interaction and spiritual wellbeing relationship; and finally the spiritual wellbeing and gardening relationship. The review concludes by identifying common methodological approaches in the subject fields, providing some working definitions and highlighting the ways in which this study seeks to address some of the gaps in the literature.

2.1 The context, conceptualisation and measurement of Wellbeing

2.1.1 The emergence of wellbeing as a concept

Wellbeing is a wide ranging contemporary term frequently used to discuss the condition of an individual or group. The Oxford English dictionary defines wellbeing as: 'The state of being comfortable, healthy, or happy' (2016 p.1), although it is often considered more widely as both a process and a state (ESRC, 2007). The notion of wellbeing is increasingly considered by governments as important at both an individual and societal level (e.g. DH, 2014).

This focus on wellbeing has not, however, always been of central concern; previously the progress of countries was primarily measured using gross domestic product (GDP) which focussed on the economic success of a nation (ONS, 2016). GDP and individual wellbeing are increasingly considered to be disparate concepts, with Robert Kennedy famously stating that 'GDP measures everything except that which makes life worthwhile' (as cited in Costanza et al., 2014 para 9). As it becomes evident that GDP does not necessarily guarantee quality of life (Pacione, 2003) governments have become increasingly concerned with wellbeing (United Nations, 2012). Whilst this concern with wellbeing may be prioritised by primarily western governments, the concept itself is a universal matter addressing common global issues and being discussed in tandem with dimensions such as happiness and quality of life (Costanza et al., 2007). This global concern is reflected in the rise of measures such as the Happy Planet Index (HPI, 2015) which seeks to document wellbeing in 151 different countries,

whilst locally in the UK personal wellbeing is now measured as part of the Annual Population Survey (ONS, 2015). Consequently issues of wellbeing have moved into the global political and policy arena, with high levels of wellbeing now seen as an indicator of, and contributor to, a healthy population (Evans et al., 1994). Wellbeing is intrinsically linked with perceptions of health and is thought to provide benefits such as improving recovery from illness through to being associated with positive health behaviours (Department for Health DH, 2014). Consequently, developing and maintaining wellbeing is a key focus of a flourishing society and a contemporary indicator of progress (Huppert & So, 2013).

Wellbeing can be understood both objectively, through the needs and rights of whole populations and subjectively, through the wellbeing effects of personal experiences. Despite this distinction, high levels of subjective wellbeing amongst individuals is considered advantageous for all, as it is thought that it plays a central role in creating flourishing societies which are made up of happy, healthy and engaged citizens (NEF, 2014). Subjective wellbeing, that which focuses on the individual experience, consists of a range of aspects that includes ‘people’s emotional responses...and global judgements of life satisfaction’ (Diener et al., 1999 p.277).

2.1.2 Definitions and conceptualisations of wellbeing

The current focus on wellbeing has seen a rise in studies seeking to address the issues surrounding its definition, conceptualisation and measurement. The word ‘wellbeing’ alone is difficult to define as the term needs to reflect wide-ranging and overlapping concepts.

Table 2.1: Definitions and sources of wellbeing that have informed this study.

Definition	Source
‘The state of being comfortable, healthy, or happy’.	Oxford English Dictionary (2016 p.1)
‘a positive physical, social and mental state’	UK Government - Whitehall Working Group (DEFRA, 2007a p.119).
‘a state of being with others, where human needs	Economic and Social Research Council

are met, where one can act meaningfully to pursue one's goals, and where one enjoys a satisfactory quality of life'	(ESRC) Research Group on Wellbeing in Developing Countries, (June 2007 para 1).
'positive and sustainable characteristics which enable individuals and organisations to thrive and flourish'	Well-Being Institute at the University of Cambridge (Ereaut & Whiting, 2008 p.4).
'more than just happiness...well-being means developing as a person, being fulfilled, and making a contribution to the community'	New Economics Foundation UK Independent Think Tank (Shah & Marks, 2004 p.2)

As can be seen from some of the definitions in Table 2.1, the concept of wellbeing may be loosely or more specifically defined with phraseology often suiting a specific purpose or aim. For example, for many of the more formal groups such as the UK's Whitehall Working Group and other government bodies, the concept is quite specific. Much like the dictionary definition, these descriptions refer to wellbeing as a state, thus something that is achievable and consequently measurable; as such concise, simple definitions provide a useful starting point for developing large scale measures. In 2011 the UK's Office for National Statistics (ONS) began measuring wellbeing via individual self-report questions in national surveys, utilising the data to appraise current policy and identify and target societal needs. It is therefore important to acknowledge that wellbeing has been tightly linked to policy as either 'a policy goal in itself, or a means of achieving a goal...or outcome' (Sustainable Development Unit, 2005). Identifying wellbeing as an achievable state involves selecting measures of wellbeing that provide a specific identifiable outcome. As being able to identify whether an individual has or has not achieved a state of wellbeing is particularly useful when implementing policy based on the results. Although recent government measures have begun to acknowledge aspects such as sense of meaning and purpose (Beaumont, 2011), such features pose challenges to both measurement and subsequent application of outcomes in terms of policy. Within the academic literature, wellbeing is often expressed as reflecting 'both a state and a process that is multi-

dimensional' (ESRC, 2007 p.2). This more-encompassing understanding conceptualises wellbeing not only as a goal to be reached but also as an ongoing endeavour. Due to its multi-dimensional nature, wellbeing is also identified as potentially accessible to all. For example, even those who may struggle with specific dimensions such as poor physical health may find their wellbeing flourishes in other dimensions such as spiritual wellbeing. These broader definitions include developmental terms, such as thrive and flourish (Ereaut & Whiting, 2008), inferring a developmental element to wellbeing. Additionally, these wider definitions are more intricate and less deterministic, identifying an extensive range of lifestyle factors that can contribute to wellbeing. The multi-dimensional nature of wellbeing is reflected in the academic literature, in which wellbeing research spans a wide range of fields and utilises a variety of both quantitative and qualitative measures.

For many think tanks, social justice and charitable groups (e.g. NEF, 2012; The Wildlife Trust, 2014; Action for Happiness, 2015) wellbeing definitions are broader and therefore more inclusive, but also detailed around specific features. These groups offer more accessible and practical definitions than those offered in the academic literature, often being conceptually accessible to a wide range of the population. For example wellbeing as defined by NEF is wider than personal happiness and conceptualised as being comprised of two main elements feeling good and functioning well (NEF, 2008). These wider definitions and conceptualisations include aspects such as life enhancement and sustainability, suggesting a more holistic approach to wellbeing.

Overall the definitions provided by non-governmental organisations evolve wellbeing beyond a concept that can be easily measured to one that is both developmental and intrinsically personal. Consequently overall definitions of 'wellbeing' are relatively generic and include a wide range of both health and lifestyle features. This range of conceptualisations ensures wellbeing consists of an increasing number of aspects, measured in a variety of ways. For this study, wellbeing is to be considered both a state and a process.

2.1.3 Elements of wellbeing and their integration

Despite the difficulties involved in its definition, there appears to be broad agreement that wellbeing goes beyond basic needs and involves enhancement of an individuals' life. Good health and wellbeing on a practical level commonly includes three broad dimensions of an individual's life: physical, mental and social (WHO, 1946). Physical wellbeing primarily investigates how aspects of an individual's life contribute to and enhance their physical health through meeting key needs such as food and safety alongside related concerns such as keeping active and taking care of their body. This dimension of wellbeing is often of primary concern in developing countries (Gasper, 2007), but also has great relevance in western societies through issues such as obesity and negative outcomes associated with increasing levels of poverty. Mental wellbeing includes psychological and emotional wellbeing with a focus on self-acceptance and personal growth alongside happiness and satisfaction with life (Dodge et al., 2012). Social wellbeing focuses on the relationship with others, and features aspects of life such as an individual's sense of 'contribution, integration and acceptance' (Lopez et al., 2014 p.66). The dimensions of physical, mental and social wellbeing do not exist in isolation but are intrinsically linked through interrelationship and cumulative effect (NEF, 2008).

Researcher reflection – The literature review for this study was extremely challenging mainly due to the areas of investigation. Terms such as 'wellbeing' and 'spiritual' tend to be reflected widely in both academic publications and popular culture. As such it became apparent that participants' understanding of the terms may be very different to the academic perception. In order to manage this and help focus my own thoughts, I concentrated instead on looking at the features of each concept. As such, a working understanding of the concepts became more important to me than a definition and made discussions with participants much clearer.

Spiritual wellbeing is an additional dimension of wellbeing that follows that pattern and reflects aspects of life such as wholeness, meaning and purpose that often fall outside the above dimensions. This study sees this strand of wellbeing as an integrative and elemental aspect of wellbeing that builds on and connects the many dimensions of wellbeing.

Table 2.2: The wellbeing spectrum

Dimensions of wellbeing	Features
Physical	Characterised by Needs i.e. food, shelter, security and freedom from illness and injury. (Maslow, 1943).
Mental	<p>Moves beyond ‘the physical basics’ and focuses on cognitive concerns and development.</p> <p>Includes subsections such as:</p> <ul style="list-style-type: none"> • Emotional wellbeing – focusing on positive and negative affect (Diener et al., 1999). • Psychological wellbeing – focusing on personal growth and positive functioning (Ryff, 1989; Ryff & Keyes, 1995).
Social	Focuses on social relationships, pro-social behaviour, social contribution and social integration (Ryan & Deci, 2001).
Spiritual	<p>Focuses more widely than the self or other people to include:</p> <ul style="list-style-type: none"> • Wholeness, a sense of fulfilment in life (Bensley, 1991). • Transcendence, the human-spiritual interaction (Fisher, 2011). • A link to something greater than oneself (Hawks, 1994). • A sense of meaning and purpose in life (Westgate, 1996).

The wellbeing spectrum as illustrated in Table 2.2 and Figure 2.1 mirrors other categorisations of wellbeing. For example, Maslow’s hierarchy of needs (1943) bases a theory of human motivation around five categories of motivational needs which develop from basic needs through to psychological needs culminating in self-actualisation. Whilst the categories are not mutually exclusive and are interdependent (Wahba & Bridwell, 1976), the notion of a hierarchy can be seen as implying that spiritual matters are addressed once basic needs are met. In contrast, the concept of spiritual wellbeing differs to self-actualisation in that it is not simply something to be

worked towards but also appears to support the developing stages i.e. physical, mental and social wellbeing. This is evidenced in research which finds that individuals with poor health or experiencing end of life care are in some instances still reporting spiritual wellbeing (McClain et al., 2003; Yeh, 2015). These points suggest that it can be identified as both a standalone category, but may also be an integral supporting factor of overall wellbeing.

An integrated approach to wellbeing is supported by the biopsychosocial model (Engel, 1977) which acknowledges not only the role of non-biological determinants in health and wellbeing but also the overlapping and cumulative effect of each aspect of an individual's life. This model has been developed further in recent years with the biopsychosocial-spiritual model (Sulmasy, 2002). Sulmasy's more encompassing framework reflects a move within health care toward a more integrative, whole person approach, specifically highlighting spiritual wellbeing as one of the elements to be measured. This study reflects the biopsychosocial-spiritual model, focusing on a whole person understanding of wellbeing and examining the role spiritual strand of wellbeing may play. Such an approach acknowledges the interdependence of wellbeing dimensions and the need for spiritual wellbeing to be recognised as an integral part. Consideration of the above models offers a basic critique of the wellbeing spectrum, acknowledging the separate strands of wellbeing whilst recognising their integrated nature (as outlined in Figure 2.1), thus helping to clarify the concept of wellbeing further.

2.1.4 Hedonic, Eudaimonic and Chaironic wellbeing

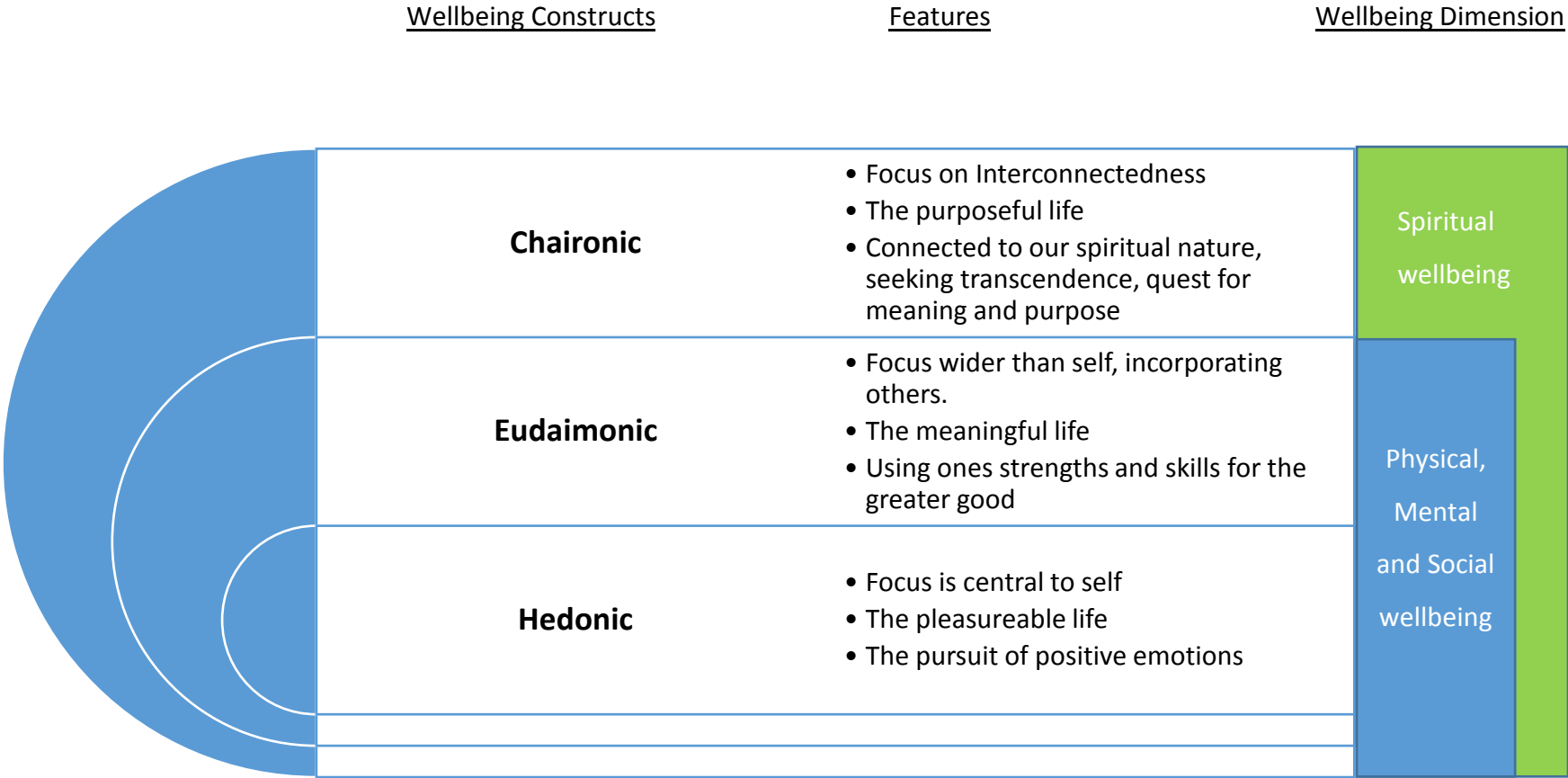
Research in the field often includes, subjective, objective wellbeing alongside, hedonic, eudaimonic and chaironic wellbeing alongside the practical application of these concepts in the form of physical, mental, social and spiritual wellbeing (Ryan & Deci, 2001; Passmore & Howell, 2014; Dodge et al., 2012; Fisher, 2011). Although often discussed together, these dimensions are not always compatible; for example, it has been argued that objective and subjective wellbeing reflect different concepts with one not necessarily being reflective of the other (Gasper, 2005).

The key features of subjective wellbeing are often divided into two types: hedonic and eudaimonic (Ryan & Deci, 2001). Hedonic wellbeing focuses on the increase of happiness and positive affect and the decrease of pain and suffering, i.e. the maximising of pleasure (Diener et al., 1999; Lyubomirsky & Lepper, 1999). Whilst eudaimonic wellbeing focuses on a meaningful life as opposed to a pleasure filled life, i.e. the setting and meeting of meaningful goals (Rogers, 1961; Ryff, 1989; Boniwell, 2015). It is therefore apparent that subjective wellbeing is a multi-dimensional construct that may be affected by a range of aspects of an individual's life. Subjective wellbeing provides the context for this study as it focuses on how individuals feel about and experience their lives (Diener, 2009). Acknowledgement of both hedonic and eudaimonic wellbeing is also relevant for this study, as gardening is often seen as both a pleasurable and meaningful pursuit, e.g. through the growing of produce. However, this study moves beyond those conceptualisations of gardening to explore the experiences that may develop and support spiritual wellbeing.

In addition to concepts of eudaimonic and hedonic wellbeing, Chaironic wellbeing is a third type of wellbeing that has received less research attention. Chaironic wellbeing addresses the spiritual aspect of wellbeing and highlights its links to nature as something larger than oneself (Passmore & Howell, 2014). Chaironic wellbeing has links to both hedonic and eudaimonic reflecting some similar features such as meaning, but then broadening those features out to incorporate the wider perspective beyond oneself.

Figure 2.1 offers a basic visual representation of the three wellbeing constructs, their features and the types of wellbeing that represent them. The model has hedonic wellbeing at the core, focussed on the self and chaironic wellbeing as an outer ring, demonstrating its interconnected perspective.

Figure 2.1: Model of wellbeing constructs, features and type of wellbeing within the wellbeing spectrum



Chaironic wellbeing includes a sense of 'feeling blessed and fortunate' because of a 'sense of awe, gratitude and oneness with nature or god' that one feels (Wong, 2011 p.73). Wong (2011) suggest that chaironic wellbeing is often associated with positive emotions, transcendental encounters and peak experiences, such as those that may be encountered in nature-based activities such as walking, climbing or gardening. Developing chaironic wellbeing is thought to be closely influenced by one's attitude to life and, in particular, an individual's sense of receptivity to encountering such experiences (Wong, 2011). Chaironic wellbeing echoes features of spiritual wellbeing as it highlights the importance of the spiritual aspect and its contemporary role in issues of happiness and wellbeing. The measurement of chaironic wellbeing is typically undertaken with validated measures of spiritual wellbeing as they commonly measure similar concepts such as sense of relationship and transcendent experiences (Delaney, 2005; Reker, 2003) and as such highlights links between these two concepts. Despite the links highlighted by Passmore and Howell (2014), they do not appear to be identical concepts. Spiritual wellbeing also appears to contain hedonic and eudaimonic components such as the experience of positive emotions and the search for a meaningful life. Spiritual wellbeing can also exist on various levels and may include a self-focus and a wider perspective. As such it appears to reflect a wider range of features than chaironic wellbeing and may demonstrate much more than a sense of transcendence or life purpose.

2.1.5 The Development of Wellbeing

To fully understand each dimension of wellbeing it is important to explore the processes through which it is developed. Recent conceptualisations have begun to address this, moving away from defining wellbeing in terms of its outputs and individual dimensions to examining the components behind overall wellbeing.

A field that takes a more holistic, components-based approach to wellbeing is that of positive psychology (Seligman, 2004). It conceives of subjective wellbeing by focussing on the wider components supportive of wellbeing such as the development of positive emotions that help to support flourishing individuals and societies (Huppert & So,

2013). The PERMA model (Seligman, 2012) offers five elements deemed essential to human wellbeing: Positive emotions, Engagement, Positive Relationships, Meaning and Accomplishment. Aspects of all of these components feed into parts of all of the dimensions of wellbeing. As such, none of these components when taken individually can represent wellbeing, but they are intrinsically intertwined reflecting a developing process and cumulative effect (Seligman, 2012).

The New Economics Foundation (NEF), a UK think tank, offers its own wellbeing framework which continues along this theme of a holistic approach but focuses on the practical processes through which wellbeing can be developed and supported. This framework moves beyond definitions and components to give examples of interlinked 'evidence-based actions' designed to promote wellbeing. NEF's 'five ways to wellbeing' identify the following actions as being beneficial to wellbeing: 'Connect, Give, Be Active, Take notice and Keep Learning' (NEF, 2008 p.3). NEF's approach to wellbeing contains both identifiable elements and practical processes through which these elements can be integrated into daily life. As opposed to definitions as being the key to understanding the dimensions of wellbeing, this study takes a similar component based approach as positive psychology but also a practical process focus reflective of NEF to understanding and supporting wellbeing.

Whilst these more holistic component- and process-based approaches are useful in widening our understanding of wellbeing, it can be difficult to identify the role and placement of each individual dimension. For example, whether the category of positive relationship falls under the social or spiritual wellbeing dimension. In relation to this study, the dimension of spiritual wellbeing is not explicitly identified in any single component or process. In addition to this, the ways in which the underlying dimensions of wellbeing behind each component may work together is not clear. For example, the ways in which wellbeing dimensions interact, develop and build on each other, as illustrated in Figure 2.1, is not clearly reflected in an all-inclusive approach. As is suggested in Figure 2.1, it may be the case that it is in the process of understanding hedonic and eudaimonic wellbeing that chaironic wellbeing is developed. The

interlinking nature of wellbeing dimensions is not clearly outlined in component and process focussed models. In the case of spiritual wellbeing this study considers its component role, but also seeks to understand its relation to other wellbeing dimensions. As such this study brings together both component and process aspects of spiritual wellbeing to explore its integrative and elemental role in the wider wellbeing spectrum.

In terms of supporting wellbeing, holistic component and process-based approaches to wellbeing can be difficult to use in the development of evidence-based actions. Frameworks such as NEF's five ways to wellbeing offers practical one-off activities that individuals can undertake in order to develop their wellbeing. In line with other healthy living campaigns such as 'five a day' (aimed at increasing fruit and vegetable intake (NHS, 2016), NEF's five ways suggests daily activities which have an instant and cumulative effect. It can be difficult to design such interventions without a clear outline of how and in what ways they are linked to the wellbeing dimensions. In addition to this, whilst these suggestions are grounded in research, the implications of undertaking such activities as smiling may be difficult to quantify in terms of wellbeing (Timo & Michaelson, 2014). Consequently, ways of identifying, supporting and measuring wellbeing may need greater consideration to ensure that the individual strands of wellbeing are not lost.

In relation to this study, spiritual wellbeing is perceived as containing aspects of chaironic wellbeing but also reflecting a wider concept and as such is developed as part of an extensive process in which an individual's perspective is widened. Consequently, undertaking one-off activities such as those promoted by NEF may be less successful in developing spiritual wellbeing as other forms of wellbeing. Understanding the spiritual strand of wellbeing may require evidence from a greater number of longitudinal studies to explore the developmental and progressive effects of taking part in one-off activities. Therefore gardening as a daily activity that requires consistency and a time commitment over at least one growing season may help to identify the process aspect of spiritual wellbeing.

2.1.6 The role of relationships in wellbeing

Several wellbeing models include the role of relationships as a feature of wellbeing. For example Ryff's concept of Psychological wellbeing includes 'positive relations with others' (Ryff & Keyes, 1995 p.719). Henriques et al's., (2014) nested model of wellbeing includes 'connections with other individuals' in the social part of its environmental domain. Seligman's PERMA model (2012) includes 'positive relationships' and Ryan & Deci's Self-determination theory (2000) argues that 'relatedness' is a human need. As such, the role of relationships with others can be construed as a key feature of wellbeing.

These relationships are primarily identified as those with other people, such as family members, friends or neighbours, yet, in increasingly individualistic cultures due to intensified self-focus human relationships can be difficult to maintain and develop (Ogihara & Uchida, 2014). This has perhaps been reflected in the rising numbers of people reporting a sense of loneliness and isolation, which is considered to affect health and wellbeing (Courtin & Knapp, 2015). Ensuring a range of positive relationships with others plays a beneficial role in our lives, but such relationships are not always within our control. As such, the role relationships with other non-human entities could play in our lives may need to be investigated further to examine whether they can be equally beneficial.

Whilst many general wellbeing models highlight the importance of relationships, discussion of spiritual wellbeing widens this out to include the value of non-human relationships (Ingersoll, 1994; Hawks, 1994). In many traditional discussions of spiritual wellbeing the focus centres on religion and one's relationship with a higher power such as God (Fisher, 2013; Ellison, 2006). However in increasingly secular contemporary societies the notion of a non-human connection providing wellbeing benefits requires consideration beyond the religious sphere. Indeed, recent studies have shown that irrespective of religion, individuals have spiritual or transcendent encounters through non-faith experiences such as engagement with nature (Meezenbroek et al., 2012).

Study of spiritual wellbeing provides a good starting point from which to begin this conversation as it already recognises the value of meaningful non-human relationships. However, this meaningful relationship may consist of anything deemed personal and important and for gardeners this could be a relationship with nature. Consequently, examining contemporary understanding and conceptualisations may help in widening out the perception of what non-human meaningful relationships may consist of.

2.2 Spiritual Wellbeing

2.2.1 The emergence of a concept

The concept of spiritual wellbeing has gained increasing importance and recognition over the last seventy years. It was first included in the concept of health by the World Health Organisation (WHO) in 1948 in which it outlined that,

‘Health is not just the absence of disease, it is a state of physical, psychological, social and spiritual wellbeing’ (WHO, 1948 p.100).

This was then developed further in 1998 as the WHO went on to state that,

‘The value of such ‘spiritual’ elements in health and quality of life has led to research in this field in an attempt to move towards a more holistic view of health that includes a non-material dimension, emphasising the seamless connections between mind and body’ (WHO, 1998 p.7).

The WHO’s recognition of the importance of the spiritual dimension of health and wellbeing and the increase of research in the field has led to a gradual growth in its acknowledgement. The ‘spiritual’ dimension has become recognised by some as ‘not peripheral but core and central’ to overall health and wellbeing (Wright, 2005 p.15). Spiritual wellbeing has been seen to provide both physical and mental health benefits, with some features associated with it such as a sense of meaning in life being related to decreased risk of cardiovascular disease and decreased mortality (Holt-Lunstad et al., 2011). Whilst in some instances high levels of spiritual wellbeing can be seen to have an integrative and enhancing effect on other dimensions of wellbeing

(Heintzman, 2002), with individuals who have encountered difficulties in life often reporting higher than average levels of spiritual wellbeing (Reed, 1987). As such the relationship between overall and spiritual wellbeing may offer a greater understanding of the holistic role it may play. Despite this recognition, the field has still received less research attention than other dimensions of wellbeing.

2.2.2 The definition and concept of spiritual wellbeing

Acknowledgement of the importance of spiritual wellbeing has led to many definitions that include the spiritual dimension within overall wellness reflecting an 'integration of physical, intellectual, emotional, spiritual and social dimensions of human functioning' (Greenberg, 1985 p.404). Whilst the concept of 'spiritual' may have begun to be acknowledged as a key feature in wellbeing, researchers are still struggling to define and measure this concept of "spiritual wellbeing".

Definitions of spiritual wellbeing may be hampered by the increasing secularisation of western societies. As western societies often seek to separate religion from state, the links between the terms religion and spiritual perhaps mean that it is often overlooked in terms of wellbeing policy thus precluding the need for a definition. For many years the words 'spiritual' and 'religion' have been intertwined and this is still the case in some respects today, with the term spiritual often reflecting both religion and non-religious practices (Casey, 2013). The inclusion of the term 'spiritual' may therefore be one of the primary issues preventing the establishment of a working definition. The lack of research surrounding spiritual wellbeing may also be due to the word 'spiritual' itself which is often discussed in the context of religion; the influence this has on its perception cannot be ignored. Yet 'spiritual' and 'religious' are also perceived as distinct concepts with many people now considering themselves spiritual, but not religious (Taylor, 2010). In an attempt to reflect this wider understanding, this study identifies spiritual wellbeing as being not necessarily related to religion or religiosity.

The terms 'spiritual' and 'spirituality' are often interchangeably used when discussing both formalised religion (Zinnbauer, 1997; Hill et al., 2000) and new age/alternative lifestyles (York, 2001). In academic literature similar terminology is used across

distinctly different dimensions of spirituality i.e. 'eco- spirituality' (Cummings, 1991), 'wilderness spirituality' (Ashley, 2007) and 'feminist spirituality' (Christ & Plaskow, 1989). This multitude of uses by such disparate groupings creates a lack of clarity around the term 'spiritual' and a discomfort with its use by some individuals when expressing their personal experiences.

The definition of spiritual wellbeing is confused further by the presence of numerous similar phrases and concepts such as spiritual wellness and spiritual health. All of these terms have struggled with definition; Bensley (1991, p.287) stated that 'there is no single recognised definition of spiritual health' whilst Hawks (1994, p.4) outlined spiritual health as:

'A high level of faith, hope and commitment in relation to a well-defined worldview or belief system that provides a sense of meaning and purpose to existence in general and that offers an ethical path to personal fulfilment which includes connectedness with self, others and a higher power or larger reality'.
(Hawks, 1994 p.4).

Whilst this definition offers some clarity around spiritual health it does not yet provide a framework on which to base the research. This research focuses on spiritual wellbeing which may be a different concept to that of spiritual health. In some instances the characteristics of spiritual wellbeing and spiritual health are seen to be similar and it is thought that factors of spiritual wellbeing may help to define spiritual health (Hawks, 1994). Ingersoll (1998) questions whether one is dependent on or causative of the other, identifying that 'the construct of spiritual wellness is a reflection of spiritual health' (p.158) and therefore dependent on it. Similarly, Ellison (1983) infers that if these terms are seen to be interlinked or causative then they must refer to different concepts. For example, if spiritual health is an underlying state on which spiritual wellbeing is based, or if spiritual wellbeing is an 'expression of spiritual health' then these terms may not necessarily reflect the same thing (Ellison as cited in Bensley, 1991 p.288). The disparity around such terms may be due to the fact that discussions surrounding it are undertaken across multiple fields of inquiry from nature

spirituality (Taylor, 2010) through to theology (Wong-McDonald et al., 2004) all of which may understand and utilise the term differently. It is acknowledged that whilst there are differences, there is also some commonality in the conceptualisation of these three phrases with many studies utilising them interchangeably (Heintzman, 2002). As such, in this literature review all three terms will be considered as they can collectively offer insight into how spiritual wellbeing may be conceptualised and defined across the fields of inquiry.

As a single definition of spiritual wellbeing is lacking that can be reliably utilised in this study, an alternative approach has been sought. A review of the literature indicated that due to the difficulty of definition 'Researchers of nature-based recreation and spirituality usually let participants self-define the concept' (Heintzman, 2009 p.74). Consequently, this approach is adopted in this study with parts of the data collection tools specifically asking participants to define the concept of spiritual wellbeing. This not only allows for a greater understanding to be gleaned, but also prevents participants having to fit their experiences into a predefined concept.

The merging of terminology and the lack of a clear definition of spiritual wellbeing provides for a disparate body of literature. Some of the research undertaken has focussed on aspects of religion and its effects on wellbeing (Myers, 2000; Whitford & Olver, 2012); for example, some spiritual wellbeing measures that are used seek to identify specific religious aspects such as congregational health (Ellison, 2006). Faith- or religious-based definitions of spiritual wellbeing can be excluding for participants who may experience spiritual wellbeing but not think of themselves as religious with measures often being perceived to focus on faith (Moreira-Almeida & Koenig, 2006). It is therefore important to consider that individual understandings may reflect a much wider concept than one solely focussed around religion. Secularisation has seen an increase in individualism and a shift in how people establish purpose, meaning and value in their lives which may no longer necessarily be guided by one's faith. As such, the ways in which individuals develop elements of spiritual wellbeing such as meaning and purpose in life may be linked to faith or non-faith-based activities such as

volunteering, building relationships and noticing beauty (Bradley, 1999; Pilkington et al., 2012). In response to this some contemporary measures developed to assess spiritual wellbeing focus quite widely and include 'connectedness with others, hopefulness, meaning and purpose in life, or altruistic values' (Moreira-Almeida & Koenig, 2006). The overlap in terminology used to describe spiritual wellbeing and the scales developed to measure it may cause some confusion for research participants. Taking into account these wider perspectives, this study considers that spiritual wellbeing may be reflective of a dimension of wellbeing that interconnects a range of experiences. In relation to this study, it is important to note that terms such as 'spirituality' and 'religion' do not necessarily equate to 'spiritual wellbeing' and for some people the term itself may not accurately reflect what they are experiencing. The research has sought to address these issues by exploring the ways in which the term is defined and understood by people of faith and non-faith backgrounds by identifying the ways in which it may be experienced consciously and subconsciously in their everyday gardening activities.

In summary, much of the literature surrounding the definitions and conceptualisations of spiritual wellbeing and its measures, are built on and focus around the 'spiritual' side of life. Consequently whether this refers to religion or something else, the literature in this field offers some insight into how it is currently conceptualised. It is hoped that the findings of this study may also offer some insight to the discussions surrounding these constructs and a greater understanding of the term 'spiritual wellbeing'.

2.2.3 Features and measures of Spiritual wellbeing

Despite the lack of a formal definition, conceptualisations of the spiritual aspect of wellbeing and health appear to share a number of consistent features. Table 2.3 outlines the similarities and the less common features identified by some authors. This table has been created based on the frequency of these features throughout the literature.

Table 2.3: Similar features of spiritual wellbeing, spiritual health and spiritual wellness.

Common features	Reference
Meaning - Meaning and purpose in life	Westgate, 1996; Hawks, 1994; Schroeder, 1992.
Transcendence – Transcendent beliefs and experiences; relating to something beyond the human level; the human spiritual interaction; Need for transcendence.	Westgate, 1996; Fisher, 2011; Bensley, 1991; Ellison, 1983; Hood-Morris, 1996.
Community relationship - Need for relating; connectedness with others; in- depth relationships.	Bensley, 1991; Fisher, 2011; Hawks, 1994; Westgate, 1996; Ellison, 1983; Ingersoll, 1994; Howe-Murphy & Murphy, 1987; Schroeder, 1992.
Wholeness - A sense of completeness in life; a sense of all wellbeing dimensions being met.	Bensley, 1991; Hawks, 1994.
Intrinsic Values - values and beliefs of community and self; concern and care for something greater than self.	Bensley, 1991; Westgate, 1996.
Environment - Connecting with nature; oneness with nature	Fisher, 2011; Hawks, 1994.
<u>Less common features:</u> Personal domain, interrelating with self. A controlling higher power or godlike force Conception of the divine	Bensley, 1991; Fisher, 2011.

Table 2.3 highlights features of spiritual wellbeing that either extend or add to those in traditional discussions of wellbeing. In terms of extension, the importance of relationships is reflected in both mental and social wellbeing (Ryff & Keyes, 1995; Henriques et al., 2014; Ryan & Deci, 2001), however the benefits are highlighted in terms of human relationships. In contrast spiritual wellbeing/wellness conceptualises relationships in a broader sense, identifying a relationship as being in touch with an Other (Schroeder, 1992), including the ‘self, others and the infinite’ (Ingersoll as cited

in Westgate, 1996 p.28). A similar example is apparent within the role of the environment with it being identified as a place to provide physical wellbeing through exercise and mental wellbeing, as a place to provide respite. Spiritual wellbeing however moves beyond these conceptualisations, identifying the environment as more than a setting but as a place to express care and nurture to something other than oneself and develop a sense of connectedness (Fisher, 2011).

Spiritual wellbeing appears to be characterised by holistic elements such as meaning, transcendence and wholeness. As such, it not only adds another category to the wellbeing spectrum, but also reflects and combines many of those elements already present in other wellbeing dimensions. For example, the concept of wholeness would be unfeasible if physical, mental and social wellbeing were absent.

In summary, features of spiritual wellbeing, such as a sense of meaning and purpose in individual's lives are important in its measurement and identification. The occurrence of such features may help to highlight instances of spiritual wellbeing even where it has not been explicitly recognised as being present. For example, a sense of meaning and purpose in life may not be explicitly identified by participants as an aspect of spiritual wellbeing, but is identified as such in the literature (Westgate, 1996). The above commonalities and differences between spiritual wellbeing and other wellbeing dimensions provide a useful starting point for further discussions around the concept.

2.2.4 Occurrence and measurement of Spiritual wellbeing

Spiritual wellbeing is currently seen to be supported through activities that facilitate its key features to be developed. Activities that allow for a sense of connection, concern for something other than oneself, generate a sense of wholeness, provide meaning and purpose could all be seen to develop spiritual wellbeing. Activities such as volunteering are often cited as being beneficial to overall wellbeing and health (Ryff, 2013; Casiday et al., 2008) and also include many spiritual wellbeing elements such as meaning and purpose and sense of community relationship. Leisure activities are also identified as a key way in which it could be supported as they provide the time to focus

outside of everyday tasks and to widen focus to incorporate things other than oneself (Heintzman, 2002).

In relation to the study aim, gardening as an activity may offer some of the above aspects seen as beneficial to spiritual wellbeing. Gardening utilises nature as an opportunity to express these features as opposed to human relationships, for example through developing a sense of meaning and purpose or highlighting a sense of connection. Gardening as a leisure activity also potentially provides the time for individuals to focus on something other than oneself and may develop positive emotions through personal enjoyment and achievement.

2.2.5 Measures of spiritual wellbeing

Spirituality is perceived as 'a very complex and multi-dimensional construct with no universally accepted measures' (Moberg, 2002 as cited in Heintzman, 2003 p.217). Spiritual wellbeing, wellness and health follow this pattern and display 'no obvious structure or measureable subcomponents' (Eberst, 1984 p.100). Nevertheless, the similarities and shared features outlined by researchers have allowed for some measures to be developed. The majority of these utilise Likert scale measurements and self-report survey designs (Reker, 2003; Ellison, 2006; Elkins et al., 1988; Delaney, 2005) and concentrate on specific aspects of spiritual wellbeing such as transcendence. Many of these measures offer high levels of reliability and validity. However, as spiritual wellbeing measures are often seen to be seeking to 'measure the immeasurable' (Moberg, 2010 p.99) studies investigating the concept may find that quantitative measures alone are less helpful. Qualitative research around spiritual wellbeing may support quantitative data by offering a greater understanding giving a more detailed overview. Studies in the field of leisure tend to primarily utilize qualitative methods and as such are able to explore the meanings and lived experience behind the concept of spiritual wellbeing (Heintzman, 1999; Unruh, 2011). Both qualitative and quantitative approaches offer valuable data towards developing a more comprehensive understanding.

Spiritual wellbeing research has been primarily undertaken with respondent groups that have health difficulties. Participant samples are typically those recuperating from illness, in palliative care or encountering other physical health difficulties (Mickley et al., 1992; McClain, et al., 2003; Puchalski, 2002; Mills et al., 2015; Bekelman et al., 2007). Individuals experiencing general mental health issues such as stress and depression (Lee, 2014) or more specific difficulties such as post-traumatic stress (Bormann et al., 2012) are also prevalent respondent groups in this field. With limited research undertaken with healthy populations, spiritual wellbeing may therefore be difficult to discuss outside of these health-crisis situations. Although valuable, such research supports the notion that it is something only engaged with when people are suffering, become ill or are struggling to cope. This fails to address the role spiritual wellbeing may play in terms of the life enhancement of healthy populations, as reflected by the positive psychology outlook that informs this study.

This study can therefore address this gap in the literature by seeking to understand the spiritual wellbeing experiences encountered by primarily healthy participants.

2.2.6 Working definitions

It is clear from the literature that the term spiritual wellbeing has a range of meanings. Whilst the research participants were not given a definition of spiritual wellbeing, a working understanding of the term on which to base the study was employed. In order to develop this understanding the phrase was split into its component parts. The review of the literature has helped to identify and define the individual terms of 'wellbeing' and 'spiritual' as understood in the initial stages of this study, prior to data collection. These working definitions have provided some understanding of how the terms may be interpreted more widely. Table 2.4 outlines how these terms are defined and considered as separate entities.

Table 2.4: Working definitions

Term	Working Definition
Wellbeing	'Well-being is more than just happiness. As well as feeling satisfied and happy,

	well-being means developing as a person, being fulfilled, and making a contribution to the community' (Shah & Marks, 2004, p. 2)
Spiritual	'The experience of being related to or in touch with an "other" that transcends one's individual sense of self and gives meaning to one's life at a deeper than intellectual level' (Schroeder, 1992).

The definition of wellbeing provided in Table 2.4 is currently used by NEF. It is based around developing 'flourishing individuals that contribute to a flourishing society' (2008). This definition has been selected as it is wide-scoping and identifies wellbeing as a form of life enhancement, reflecting themes within positive psychology with a move beyond hedonic happiness toward a more eudaimonic approach. As this definition could be seen to be more descriptive than definitive (Dodge et al., 2012) it keeps the concept open throughout the research whilst also offering a sense of structure around which to base interpretations of participants' understanding.

The definition of 'spiritual' is also relatively open to interpretation and does not necessarily imply a religious component, thus reflecting much of what is outlined in the literature. The definition describes instead a personalised relationship with something greater than oneself, which can be defined in detail by the individual. The experience of being in touch with an Other may be particularly relevant in terms of gardening where a partnership with an Other is a necessary part of the garden growing process. The personal perspective of the participant may identify this 'other' as the role of creation, the sense of a higher being or nature itself.

It is important to note however, that whilst the definitions of the individual terms of 'wellbeing' and 'spiritual' may reflect some components of the overall concept of 'spiritual wellbeing' they do not offer a complete picture. The above working definitions alongside the data collected from participants' regarding their own understanding will be used to offer a more comprehensive description of spiritual wellbeing in chapter 6.

2.3 The nature-wellbeing relationship

2.3.1 Overview

Research indicates that certain factors are seen as key to creating the right conditions for wellbeing to flourish and one of these is a 'healthy and attractive environment' (Defra 2007, as cited in Scott, 2012 p.34). Interaction with the natural environment has long been seen as beneficial to human health and an important contributor to wellbeing (for reviews, see e.g., Keniger et al., 2013; Hartig et al., 2014,). Nature-based leisure activities such as gardening and outdoor walking have been found to benefit multiple dimensions of human health/wellbeing (e.g., Hawkins et al., 2011; Marselle et al., 2013, 2014; Okvat & Zautra, 2011). A range of physical and mental health and wellbeing benefits can be identified in such activities from an increase in positive emotions (e.g., Hinds & Sparks, 2011; Irvine et al., 2013) to a reduction in stress levels (e.g., Roe et al., 2013, Hawkins et al., 2013).

Contact with nature in our lives is increasingly considered within policy as relevant for health and wellbeing with growing concern about the effects that declining interaction could have on human wellbeing (DEFRA, 2011; Natural England, 2016). Key research in the field has provided substantial evidence in support of the benefits of interaction with the natural environment (Kaplan & Kaplan, 1989; Ulrich, 1981, 1991; Kaplan, 1995). Kaplan's Attention Restoration Theory (ART) focuses on the cognitive benefits of nature-based activity, such as our ability to focus attention. ART proposes that natural environments help with recovery from mental fatigue (often the result of prolonged directed attention) because they contain restorative characteristics such as a sense of being away or fascination (Kaplan, 1995). Ulrich's Psychophysiological models highlight that even viewing nature scenes can have positive influences on wellbeing (Ulrich, 1981) and can aid stress recovery in comparison to urban environments (Ulrich, 1991). Taken together, these studies provide evidence in support of the benefits of nature to overall wellbeing.

Biophilia is perhaps the theory most closely reflective of the spiritual wellbeing benefits from interaction with nature, as it posits an emotional and spiritual

connection with the natural world (Kellert & Wilson, 1995). The Biophilia Hypothesis (Wilson, 1984) proposes that there may be a 'human dependence on nature' far beyond practical necessities (Kellert & Wilson, 1995 p. 65) and highlights a human need to affiliate and connect with other life forms (Wilson, 1984). Biophilia reflects the need for a meaningful relationship and a sense of oneness identified in aspects of spiritual and chaironic wellbeing (Wong, 2011). Biophilia therefore provides a platform on which to begin to discuss nature as a non-religious example of a meaningful relationship with something greater than oneself (Soule, 1993) and its potential benefits to individual spiritual wellbeing. Whilst it has been argued that Biophilia is poorly supported by scientific evidence (Joye & De Block, 2011) and neglectful of Biophobic responses to nature (Ulrich, 1993), it does offer some rationale for the benefits of an innate human-nature link.

Grounded in the theories of ART, Psychophysiological models and the Biophilia hypothesis, 'Nature Deficit Disorder' is a phrase used to suggest that not only is being in nature good for us, but being away from it may be detrimental to us (Louv, 2008, 2012). Nature deficit disorder highlights the benefits of nature interaction to health and wellbeing as outlined in the literature and has gained some popularity in contemporary conceptions of nature and wellbeing. Nature deficit disorder has sparked further research in the field with some focusing on the effects a lack of nature-interaction may have on children's development, citing a rise in childhood obesity and depression (Driessnack, 2009). Louv (2012) highlights the need to reconnect with nature, describing nature as Vitamin N and a necessary aspect of daily life in improving psychological, physical and spiritual health. Louv points to the 'spiritual value of green exercise' such as gardening, by suggesting that nature in our lives may provoke a sense of wonder and amazement which may be supportive of spiritual health (Louv, 2012 p.72).

In summary, recent years have seen a rise in mental and physical health concerns for both adults and children alongside a global focus on quality of life and wellbeing (Scott, 2012). These concerns, together with increasing numbers of people living in urban

areas with concomitant diminishing access to natural spaces and nature-based experiences (Louv 2008, 2012), have seen a drive to encourage individuals to engage in nature-related activity. For example, in the UK there has been an increase in projects such as 'The Big Dig' - a UK gardening scheme and 'Walking for Health' programs (Sustain, 2015; Walking for Health, 2015). With regard to social policy, an increase in nature interaction may develop subsequent health benefits that may decrease pressure on local health and support services (Pretty, 2004) whilst in terms of the environmental benefits, increased contact with nature may develop a sense of environmental stewardship of local natural spaces (Nisbet et al., 2009). The benefits of nature interaction activities that connect individuals to their environment may therefore be a key factor in developing and supporting a sustainable future for both humans and the environment. This study acknowledges the importance of the human-nature link and seeks to better understand the relationship between humans and nature and the effects such a relationship may have on spiritual wellbeing.

2.3.2 Wellbeing benefits of nature interaction

The majority of research to date focuses primarily on physical, mental and social benefits of nature interaction such as increased engagement in and enjoyment of physical exercise (Thompson Coon et al., 2011) restoration from stress (Van Den Berg & Custers, 2011; Catanzaro & Ekanem, 2004) and social cohesion (Hartig et al., 2014). In a recent review of the literature Hartig et al., (2014) have also described how the benefits of nature interactions intertwine and argued that activities such as community gardening are particularly beneficial in addressing multiple wellbeing dimensions. Keniger et al.'s (2013) review identified six wellbeing effects generated through interaction with nature: 'Psychological, Cognitive, Physiological, Social, Spiritual and Tangible' such as growing food on a personal garden (p.917). However, the majority of studies in this field have focussed on the first three of these benefits (Psychological, Cognitive and Physiological) with the latter three (Social, Spiritual and Tangible) receiving less attention or being perceived as subsidiary effects. This may be due to the fact that a decrease in reports of ill health or increased confidence can be more easily measured than issues of spiritual wellbeing.

Studies that focus on the social, spiritual and tangible benefits of everyday nature-based activities are less common and tend to centre on specific populations. As previously stated, spiritual wellbeing studies tend to focus on participants with physical and mental health concerns and this is often also the case in nature-based studies. For example, study samples in nature-based studies often include participants suffering life threatening or chronic illnesses (Unruh & Hutchinson, 2011; Riley et al., 1998) or those experiencing life challenges such as recovery from addiction (Bennett et al., 1998). Consequently, in recent years nature interaction has become perceived as a prescriptive measure. Whilst this may support policy-focussed measures to reduce pressure on health services, it fails to investigate the possible life-enhancing features of nature interaction. Studies addressing primarily physiological concerns whilst disregarding higher level necessities such as meaning and purpose in life, limit the role that nature interaction may play in supporting wellbeing (Hartig, 2014). In studies that measure a wide range of benefits, those of a spiritual nature are rarely reported as a primary reason for engaging in nature-based activities, but are often reflected upon and acknowledged as a benefit after the event (Irvine et al., 2013). Nature interaction experiences that enhance 'meaning and purpose' or a 'sense of being connected to a larger reality' are believed to provide 'spiritual benefits' (Irvine & Warber, 2002 p.80). The spiritual benefits of nature interaction activities with healthy populations are therefore apparent but may need to be more directly addressed in academic research.

2.3.3 Connection to Nature

Whilst interaction with nature may be seen as beneficial to health and wellbeing, a deeper sense of connection to nature may provide further benefits. Feeling a sense of connection is often reported as a feature of wellbeing (Pretty et al., 2007; NEF, 2008, Fisher, 2011; Seppala et al., 2013). This sense of connection is often considered in terms of human relationships, i.e. a faith community, a neighbourhood or a family. Nature not only forges such connections (Kuo & Sullivan, 2001) but the relationship between humans and nature itself may also offer a similar sense of connection (Kellert & Wilson, 1995). This sense of connection is rooted in the Biophilia Hypothesis which

proposes an innate bond between humans and nature (Wilson, 1984) but goes beyond this instinctual relationship to one of love and care for nature.

“Connection to nature” is a popular phrase often used to reflect a deep and positive relationship with nature that may offer wellbeing benefits (Perrin & Benassi, 2009; Cheng & Munroe, 2012; Tam, 2013). In popular culture, a connection to nature ‘describes the mix of feelings and attitudes that people have towards nature... “loving nature”, having a “sense of awe and wonder” or simply “caring for the environment”’ (RSPB, 2015). This sense of connection has been found to be correlated with psychological wellbeing, meaningfulness and vitality (Cervinka et al., 2011) and as such may have much to offer to an individual’s wellbeing. An increased sense of connectedness to nature appears to offer a range of benefits from respite and restoration, through to happiness (Zelenski & Nisbet, 2014), increased mindfulness (Howell et al., 2011), help with perspective taking (Mayer & Frantz, 2004) and an ability to reflect on life’s problems (Mayer et al., 2008). Some studies have also suggested that increased nature connectedness may also be a predictor of pro-environmental behaviour, with individuals demonstrating increased environmental concern and ecological behaviours (Nisbet et al., 2008). This raises an important aspect of nature connectedness that may suggest that it is not only beneficial for individuals but also for the natural environment. It is also important to note that nature interaction does not equate to a connection with nature and it cannot be assumed that all those involved in nature-based activities are experiencing a deep connection with nature.

2.3.4 The role of positive emotions

Positive emotions such as awe and inspiration are often reported in nature-based activities (Fredrickson & Anderson, 1999; McDonald & Schreyer, 1991; Ashley, 2007). The development and expression of positive emotions is identified as an aspect of overall wellbeing (Seligman, 2004) and as such may suggest that the benefits of nature-based activity span the wellbeing dimensions. McDonald (1989) argues that outdoor experiences create positive emotions which may lead to ‘expanding spheres

of continuity' (p.20) in which the benefits of the experience expand beyond the immediate event and individual. This is similar to Fredrickson's Broaden and Build theory of positive emotions (2001) in which she highlights the multi-faceted role that ten positive emotions play in supporting wellbeing. It is thought that regular occurrences of positive emotions such as love, joy, hope and gratitude may help to optimise health and general wellbeing through 'broadening the thought action repertoire' and 'building personal resources' (Fredrickson, 2013 p.16). Consequently the experience of positive emotions in nature-based activity may indicate wellbeing benefits beyond a specific event or activity and across wellbeing dimensions.

Positive emotions such as hope and awe are also frequently reported by respondents in spiritual wellbeing studies (Carson et al., 1988; Fredrickson & Anderson, 1998) and it has also been acknowledged to reflect 'positive feelings' such as 'wholeness, satisfaction, joy, contentment, beauty, love' (Gomez & Fisher, 2003 p. 1976). As such, positive emotions offer another link between nature-based activities and spiritual wellbeing.

2.3.5 The role of leisure

Leisure time is often used to engage in life enhancing activities, i.e. those things that are not necessary to day-to-day living, but that offer a sense of enjoyment and escape from everyday life. Many experiences considered to be enhancing to spiritual wellbeing such as those that involve a connection with others or develop a sense of freedom, are often reflected in the activities we choose to engage in during our leisure time (Heintzman, 1999; Schmidt & Little, 2007). As many leisure pursuits may be nature-based, such activities constitute many of our interactions with nature and thus potentially offer important insight into the link between spiritual wellbeing and nature.

Leisure time is often constituted of the same activities with many of them repeated on a weekly schedule, for example a walking group or maintaining a garden. This repetitive aspect is important as some research suggests that 'cumulative...repeated contact with nature can provide far reaching benefits' (Hartig et al., 2014 p. 217). In terms of spiritual wellbeing, there are only a small number of studies that focus around

consistent nature interaction activities and explore aspects of spiritual wellbeing such as meaning and purpose (Francis & Hester, 1990; Bhatti & Church, 2001, 2009; Unruh et al., 2000; Unruh & Hutchinson 2011). Findings from these studies focus on the garden space as a site of deep meaning, a place of memory, a sensorial space which also often reflects personal relationships (Francis & Hester, 1990; Bhatti & Church, 2001, 2009). Other studies focus on the experiences of participants suffering ill health of life crises and explore the role the activity of gardening has in their lives in terms of spirituality (Unruh et al., 2000; Unruh & Hutchinson, 2011). These studies highlight the importance of gardening in the context of ill health and its links to wider spiritual concerns such as the concept of life and death.

Studies focussed around nature interaction and spiritual wellbeing tend to focus on isolated one-off nature interactions (Fredrickson & Anderson, 1999; Ashley, 2007) and as such neglect the spiritual wellbeing benefits that could be developed through every day consistent nature experiences such as gardening. Whilst being away from everyday concerns in wilderness environments may be supportive of spiritual wellbeing (Heintzman, 2000), the recognition of the familiar through personal history and a sense of stewardship experienced in urban gardens is also important (Unruh & Hutchinson, 2011). As such there may be many spiritual wellbeing features of wilderness settings that can be also encountered through consistent nature-based activity in urban nature settings.

2.3.6 Research settings

The majority of studies measuring aspects of spiritual wellbeing and nature interaction tend to focus on one-off nature-based experiences such as wilderness retreats (Fredrickson & Anderson 1999; Ashley, 2007). Studies in this area focus on how such experiences in the natural environment may benefit spiritual wellness or spiritual health (Heintzman, 2003; Williams & Harvey 2001). Such studies often collate qualitative data from a small number of individuals and ask them to reflect back on their personal experiences (Heintzman, 2006; Fredrickson & Anderson 1999). The majority of these studies explore leisure-based nature interaction activities that focus

around short term spiritual outcomes reflected as ‘spiritual experiences’ as opposed to long term outcomes identified as spiritual wellbeing (Heintzman, 2013 p.274).

Based on a review of the literature undertaken for this study (Ashley, 2007; Fredrickson & Anderson, 1999; Heintzman 1999, 2002, 2007, 2010 and 2013; Heintzman & Mannell, 2003; McDonald et al., 1991 and Zuefle, 1999) spiritual experiences appear to differ in nature from spiritual wellbeing. Spiritual experiences tend to take place in wilderness environments and highlight ‘being away’ as a key feature (Heintzman, 2007). Such experiences have a limited time frame and as such focus around momentary or rare events that create moments beyond the everyday (Fredrickson & Anderson, 1999; Ashley, 2007). Spiritual experiences also appear to involve an element of challenge, or overcoming one’s fears, which in turn develops a sense of confidence and supports personal and spiritual growth (McDonald et al., 1991). In contrast, gardening may reflect a sense of sustainability and balance in life (Heintzman, 1999), although there are some similarities between spiritual experiences and spiritual wellbeing such as emotions of awe and hope.

The comparison of spiritual wellbeing and spiritual experiences suggests that current nature interaction studies that involve spiritual benefits may not accurately reflect the spiritual *wellbeing* experience. Despite this, the insights into the differences between spiritual experiences and spiritual wellbeing help to clarify the concepts further.

2.4 The Spiritual wellbeing and gardening relationship

2.4.1 Contemporary context of gardening

The garden has long been established as a place deemed beneficial to human health and gardening itself highlighted as beneficial to wellbeing (Dunnett & Qasim, 2000; Milligan et al., 2004). Plants have been seen to provide us with medicines to ease ailments and sustenance to develop physical health (Brown, 1999; Norfolk, 2000). The contemporary rise in gardening as a leisure activity can offer a low impact form of outdoors exercise (Bellows et al., 2003) and can increase an individual’s access to safe, nutritious food (Wakefield et al., 2007; Zick et al., 2013). Gardens and gardening activity have developed through the years and often reflect cultural and social

changes, with gardening activities seen to reflect the priorities of the society in which it they are set (Clayton, 2007). Recent years have seen the perceived value of gardens in the UK diminish, with the English Housing Survey in 2011 highlighting an increase in the hard landscaping of UK gardens (CLG, 2013). However, the human desire to grow and tend plants is still prevalent and despite the loss of natural spaces such as gardens there has been a rise in allotment waiting lists in urban areas (Wood et al., 2015). As such in the UK, access to a natural space on which to garden would appear to still be a valued asset.

Gardening has a variety of motivations for individuals and can be seen as: a personal endeavor with the garden seen as a place of personal expression (Freeman et al., 2012); as a social venture in which the garden and gardening helps individuals to connect with others (Wang & Glicksman, 2013); as a practical measure to grow food (Clayton, 2007; Francis et al., 1990); or as a link to nature (Kiesling & Manning, 2010; Shaw et al., 2013). Recognising the wide range of motivations is useful in highlighting the subjectivity of gardening and current cultural trends. In terms of this study the focus and findings are reflective of a contemporary western society and gardening is framed as a leisure activity and a way of interacting with nature.

2.4.2 Benefits of nature interaction

There are a wide range of leisure activities available to individuals that primarily take place outdoors and as such can be termed nature-based interactions. Pretty (2004) suggests that there are three types of nature interaction: viewing, presence and engagement. Keniger et al's (2013) research review identifies these as: Indirect, Incidental and Intentional.

Indirect interaction involves experiencing nature whilst not being presently in it, for example viewing nature through a window or looking at moving or still images of nature. Although considered to be a more passive type of nature interaction, considerable research has shown it to have demonstrable effects on life satisfaction alongside mental and physical wellbeing (e.g. Ulrich, 1984; Kaplan, 2001).

Incidental interaction with nature involves being in the presence of nature, but in relation to another activity, for example walking through a park en route to somewhere else. This type of activity provides a moderate level of nature interaction and helps to identify to what extent nature may affect us on a subconscious level (Keniger et al., 2013). For example, a study of walking groups in the UK indicated that group walks in nature helped to lower depression, and enhance mental wellbeing (Marselle et al., 2014 p.131).

Intentional interaction is considered to be the most engaging type of contact with nature as it involves purposive activity that brings an individual in direct contact with the natural environment. Intentional interaction includes activities such as environmental conservation volunteering, wilderness camping or gardening. Previous studies have investigated the wellbeing benefits of volunteering (Van Den Berg et al., 2011), wilderness engagement (Fredrickson & Anderson, 1999) and gardening (Kaplan & Talbot, 1983). These studies indicate that intentional nature interactions offer social and psychological benefits, with wilderness engagements also offering spiritual benefits to wellbeing.

2.4.3 Gardening and wellbeing

Indirect, Incidental and Intentional nature interaction activities address a wide range of wellbeing dimensions and, as such offer, an overview of the ways in which nature may support wellbeing. Gardening activity chiefly takes place in the outdoors (except for a small proportion of time that may be spent in for example, sheds, green and glasshouses) and involves engagement with nature and as such may be conceptualised as a multi-level nature interaction activity. Using Keniger et al.'s (2013) typology, gardens can be experienced *indirectly* (sitting viewing the garden), *incidentally* (walking through the garden) and *intentionally* (actively taking part in gardening activities).

In addition, gardening may stimulate numerous senses such as touch and smell. The importance of engaging a range of senses in natural spaces has been noted (Irvine et al., 2009) and may be beneficial in enabling individuals to engage with the natural

environment in its entirety, which is also considered important in enhancing overall wellbeing (Louv, 2012; Stilgoe, 2001). Consequently the benefits reported by those involved in gardening activity may reflect a wide range of experiences deemed conducive to many dimensions of wellbeing.

The garden as a setting supports mental wellbeing by offering a place of escape, but also a reassuring sense of the familiar (Francis & Hester, 1990). Gardening as an activity offers important psychological benefits such as respite from mental fatigue (Kaplan, 1973) and may be seen to reduce stress levels (Van Den Berg & Custers, 2011). Some research has combined these physical and mental benefits, investigating gardening as a therapeutic activity (Unruh & Hutchinson 2011) suggesting correlations between gardening activities and increased physical and mental health (Sempik & Bragg, 2016).

Whilst considerable research appears to have been undertaken into the wellbeing benefits of gardening, the spiritual or intangible benefits alongside its role as a nature interaction activity have received little research attention. Such benefits are often considered to be subconscious or less obvious experiences within gardening activity and as such are often discussed as a subsidiary or marginal aspect (Newton, 2007).

Contrasting the experiences of community gardeners with home gardeners may offer insight in terms of how gardening may benefit differing wellbeing dimensions. Community gardens and allotments are often reported as settings beneficial to wellbeing, with some researchers focusing on how allotment gardening may develop and enhance wellbeing in ageing populations (Hawkins et al., 2013; Browne, 1990). It is proposed that the wellbeing benefits of community gardens extend beyond individual wellbeing to whole communities through the promotion of healthy lifestyles and enhanced social integration (Armstrong, 2000; Teig et al., 2009). Such settings thus provide spaces in which individuals can take physical exercise, get some mental respite and experience both human and nature connection. However many of the features of spiritual wellbeing reflect the need for time alone and as such are often more evident

in solitary pursuits. Therefore the benefits of community gardening to spiritual wellbeing may be very different to those experienced by home gardeners.

The literature on wellbeing benefits of gardening does not appear to consider the close interaction that occurs between gardener and garden and the human-nature relationship that may be formed. The process of home gardening activity may offer benefits specific to spiritual wellbeing through the development of a human-nature relationship. Such a relationship created during gardening may reflect many of the features of spiritual wellbeing, such as a sense of connection and belonging (Diamant & Waterhouse, 2010). As a setting, home gardens are often established over a period of time and as such become memory spaces of past experiences (Francis & Hester, 1990). Such spaces may reflect and engender transcendent perspectives of personal relationships through memorial spaces and plants (Francis & Hester, 1990; Francis, 1995). As such home garden spaces and the gardening activity undertaken within them are potentially laden with meaning beyond the everyday. This sense of meaning evoked by a personal garden alongside a one-to-one connection with nature may provide benefits that fall into the realm of spiritual wellbeing.

The growing process may offer an experience that develops specific types of positive emotions, such as awe and hope, which are often viewed as markers of spiritual wellbeing (Heintzman, 2000). Whilst this study's focus surrounds the positive effects of gardening activity, it's important to note that negative emotions and experiences can also be encountered. Negative emotions may be triggered through challenges such as lack of control, loss of plants and sense of frustration that are faced when gardening which can be seen to provide both 'haven and heartache' (Milligan et al., 2004 p.1786). However, the value of positive emotions experienced through gardening may help to mitigate the effects of these challenges and the negative emotions they engender (Tugade & Frederickson, 2004). As such positive emotions are a relevant aspect of gardening and spiritual wellbeing to be investigated further in this study.

In summary the literature suggests a link between many of the aspects of gardening and spiritual wellbeing, from the positive benefits to the negative. This study thus

seeks to explore the spiritual wellbeing experiences encountered whilst gardening, but recognises that these could come from both positive and negative experiences.

2.5 Gaps in the literature

This section offers a summary of how the identified gaps in the literature in the preceding discussion will be addressed by this study's research aim and objectives (listed in section 1.3).

2.5.1 Research Objectives related to literature

In section 1.3 four research objectives were put forward to meet the overall aim of exploring how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners.

Objective one seeks to understand whether gardeners demonstrate a connection with nature. The literature suggests that a connectedness with nature may indicate a meaningful, caring relationship, which is also thought to be expressive of spiritual wellbeing. Therefore a sense of connectedness with nature may be a process through which spiritual wellbeing is developed in gardeners. However, gardeners are likely to have a wide range of motivations and personal perspectives, not all of which are necessarily reflective of a connection with nature (Clayton, 2007). This study therefore hopes to better understand the role a sense of connection with nature may play in developing spiritual wellbeing in gardeners.

Objective two seeks to address a gap in the literature by understanding the contemporary meanings and features of spiritual wellbeing. Literature surrounding its role within wider models of wellbeing often appears to struggle with issues of definition and conceptualisation. Asking participants to consider how they personally define, understand and experience spiritual wellbeing will contribute to the literature surrounding its definition and conceptualisation. Such data may also be useful in helping to further understand the role that it plays in models of wellbeing. Additionally, the literature review suggests a relative paucity of contemporary evidence as much of the research conceptualising spiritual wellbeing in relationship to

nature is over ten years old. Collecting current data will give an overview of new or additional features.

Objective three also focuses upon spiritual wellbeing, but seeks to go beyond features and definitions to explore gardeners' understanding and experience of spiritual wellbeing. The literature review indicates that little research has taken place exploring the everyday experience of spiritual wellbeing. As such, findings related to this objective may help to fill the gaps in this area from definition and conceptualisation to lived experience.

Objective four links spiritual wellbeing and gardening together by examining whether the features identified by the participants are developed or supported through gardening activity. In relation to study settings, much of the research regarding nature interaction and wellbeing has taken place in exceptional circumstances such as wilderness retreats. As we move into increasingly urban landscapes, the nature-based activities which individuals encounter on a regular basis may become progressively more important. This study seeks to develop much-needed knowledge regarding the spiritual benefits of nature interaction activities in terms of local nature spaces such as community or individual gardens.

Outside of the study objectives, the research addresses additional gaps highlighted in the literature with regard to the context, research approach and participant samples. In terms of context, it is important to note that much of the literature surrounding wellness, positive psychology and nature interaction comes from an American context. The majority of studies in the field are undertaken by US based academics and as such are primarily focused around US population samples and landscapes (McDonald & Schreyer 1991; Heintzman, 1999; Fredrickson & Anderson 1999). America is also the home of a wide range of literature in this area with many approaches such as positive psychology having its roots in a United States context. As such, much of the research conducted in these fields is set against this backdrop. This study thus broadens learning in this area by studying a UK context and contributes research to a small number of alternative perspectives in these fields.

Holistic approaches to wellbeing such as those proposed through the field of positive psychology offer useful conceptual frameworks on which to develop our understanding of spiritual wellbeing beyond its confined categorisation in traditional wellbeing models. This study fills a research gap by utilising such frameworks and ‘alternate lenses’ to provide counterpoints that widen out the concept of spiritual wellbeing. In terms of samples, the literature indicates that studies in the field tend to engage primarily with individuals encountering ill health or life crises. This study fills a gap in the literature by conducting research with healthy individuals. The spiritual wellbeing benefits of the human-nature relationship experienced by healthy populations are rarely examined. Consequently as a nature interaction activity, gardening may therefore offer a rich seam of potential links to spiritual wellbeing through the human-nature relationship.

2.6 Chapter summary

This review has discussed the literature surrounding the areas of inquiry that have informed this study. It has provided the context for spiritual wellbeing within the broader concept of wellbeing and outlined it as both elemental and an integrative dimension of wellbeing. The review has provided a discussion of the nature-wellbeing relationship and outlined the role such a relationship may play in spiritual wellbeing. Finally it has explored gardening as an example nature interaction activity and identified the ways in which this study seeks to address some of the gaps in the literature, by undertaking research with healthy participants and exploring urban gardens as the research setting. The thesis now moves on to outline the overall research approach including the research design and ethical considerations.

Chapter 3: Research approach

This chapter provides an overview of the overall research approach, strategy and design as undertaken in both phases of the study. Common methodologies applied in the fields of study are outlined to give context and justification for the approaches taken. Finally, the chapter concludes by outlining the ethical considerations and reflecting on the methodological approaches taken.

3.1 Research Overview

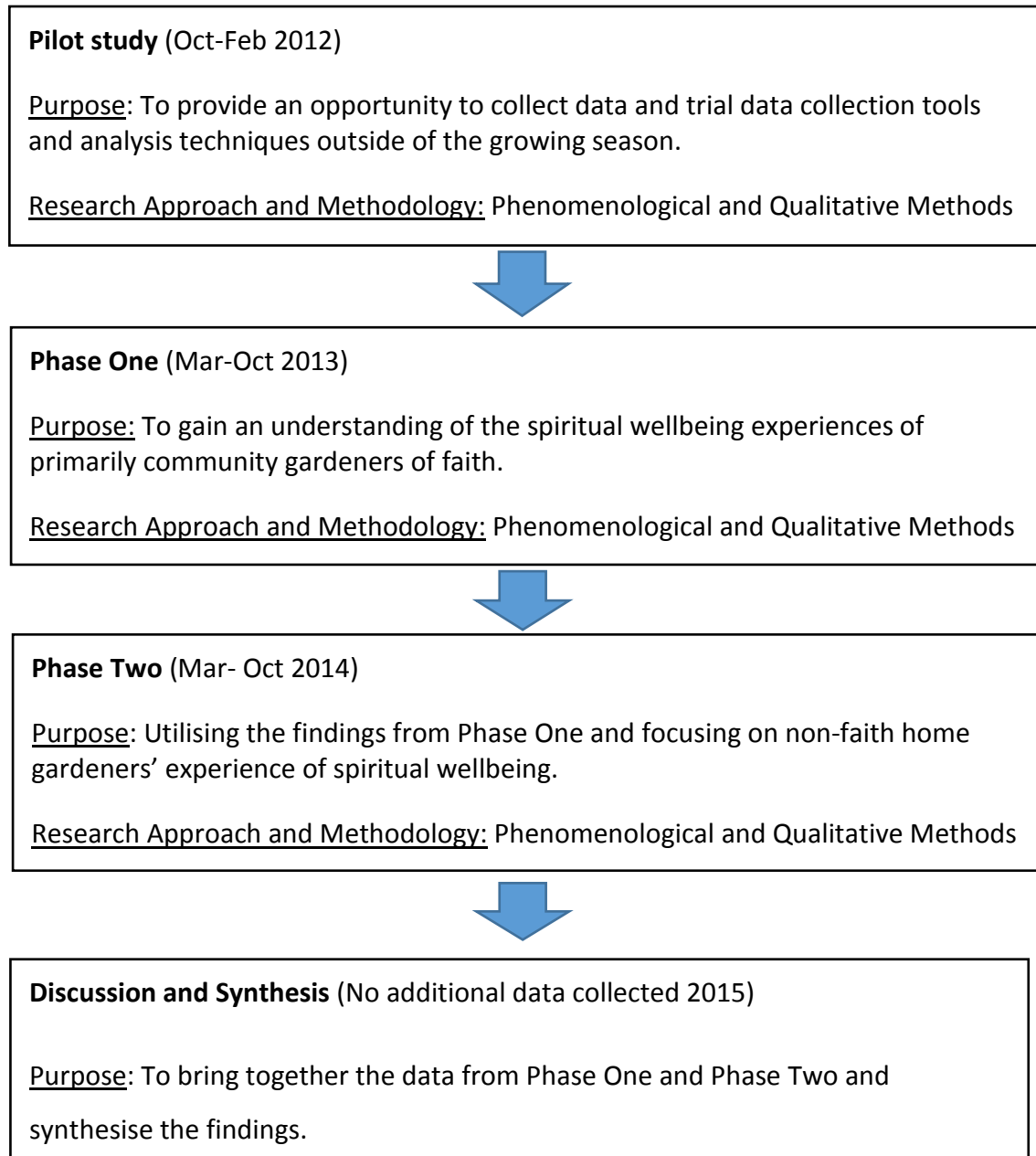
The research is iterative and exploratory and as such falls into two phases and involved a pilot stage as outlined in Figure 3.1.

3.1.1 Pilot Study

The research began with a pilot study in order to trial methodological approaches used in nature connection focussed studies. The pilot study offered an opportunity to collect data outside of the gardening season and allowed for the trial of specific data collection measures. The study focussed on the concept of nature interaction and spiritual wellbeing but utilised stargazers as its participant sample. Stargazing as an activity primarily takes place during the winter months and as such offered a ready sample from which to draw participants during the early stages of the research journey. Additionally, a review of the literature suggested that nocturnal nature interaction was a novel area that had received little research attention. Thus the pilot study provided an invaluable opportunity to trial the Connectedness to Nature Scale (Mayer & Frantz, 2004) whilst contributing some empirical data to the literature (Bell et al., 2014).

The study additionally presented an opportunity for the development of research skills such as organising and undertaking survey-based research and collecting and analysing quantitative data. The practical research experience gained through piloting proved invaluable and offered important contributions both conceptually and methodologically towards phases one and two of the research. The methodological lessons learned were directly applied to the first phase of data collection.

Figure 3.1: Research Overview



3.1.2 Phases One and Two

Phase One focussed on faith-based gardeners and spiritual wellbeing. It sought to collect data from primarily community gardeners, to provide an overview of the experiences of gardeners in differing settings. Gardeners of faith were sampled as they were thought to be in a stronger position to offer a perspective on how spiritual

wellbeing may be experienced in gardening. Both qualitative and quantitative data were collected in this phase.

Phase Two collected data from a more general sample of 25 interview participants, utilising primarily home gardeners who may or may not follow a particular faith, and collecting solely qualitative data.

The research culminated with a synthesis of the data collected at all stages to give a comprehensive overview of the links between gardening and spiritual wellbeing (as outlined in Figure 3.1).

In each of the two phases, specific methods were chosen that addressed the research objectives. As such the data collection and analysis process of each phase are outlined in detail in the respective chapters.

3.2 Research Approach, Strategy, Design and Methodology

3.2.1 Research Approach

A research approach outlines the overall way in which the study will be undertaken and it is closely linked to the research aim and objectives. Research is rarely a linear process and this study has been adaptive in its approach to accurately reflect the wide variety of experiences discussed by participants. Therefore an overall pragmatic ‘what works’ style has been utilised throughout the research (Robson, 2011, p27). This style has allowed for the study to develop based on the data collected and relatively unhindered by philosophical underpinnings. The research could be

Researcher reflection – An approach using grounded theory was initially considered as it allows the data to drive the study. Due to the subjective nature of spiritual wellbeing, this approach could avoid misinterpretation of participants experiences based on preconceptions in the literature. However for a small study restricted by time and resources, the concept of theoretical saturation began to cause issues it was decided that a phenomenological approach would be taken instead. This experience highlighted the importance of choosing approaches that not only fit the topic but also take into account the restrictions of the study.

considered to sit within the emerging pragmatist paradigm (Morgan, 2014) where the focus is on addressing the research problem using the most appropriate methods. The research design was thus grounded in the pragmatism paradigm and implemented through an iterative, phenomenological approach.

The focus of this study was to understand the spiritual wellbeing experiences of participants and how interaction with nature through gardening may enhance such experiences. It seeks to better comprehend the lived experience of gardening and the concept of spiritual wellbeing to understand if and how they may interrelate. Based on an interpretation of the literature, it appears to be both a personal and complex issue which many people struggle to verbalise and conceptualise. As found in the literature review, gardening as a leisure activity may include a wide range of personal motivations and experiences supportive of many dimensions of the wellbeing spectrum. As both spiritual wellbeing and gardening represent concepts and activities that are extremely subjective, a phenomenological approach was considered appropriate in this study.

Phenomenology ascertains that there is no external reality waiting to be measured and identified, but that reality is subjective and ever-changing (Robson, 2011). It is therefore an appropriate approach through which to address the aim and objectives of this study which seek to explore the experiences of gardeners. As gardening is also subjective and individual experiences of it may be ever-changing a phenomenological approach allows for a more fluid approach to the topic.

Phenomenology consists of two distinct branches, descriptive (Husserl, 2001) and interpretative (Heidegger, 1962). Descriptive phenomenology focuses on an individual's awareness and consciousness of a specific event. Interpretative phenomenology however, identifies the importance of the concept of 'being' alongside the concept of 'knowing' and as such goes beyond the core concept of a phenomenon to examine the meanings within it (Reiners, 2012). Phenomenology potentially therefore offers two strands to the study, both of which explore different aspects of the gardening experience: the intentional and the interpretive. Descriptive

phenomenology however focuses on how individual experiences may be described (Husserl, 2001) and in terms of this study experiences may be very difficult to identify let alone describe. As such it is the interpretation of individual descriptions that potentially provides the greater understanding in terms of spiritual wellbeing. Therefore whilst phenomenology consists of approaches that move from 'pure description to those more informed by interpretation' (Davidsen, 2013 p.318), this study takes an interpretative phenomenological approach as it seeks to explore the meanings behind gardening and the less obvious experiences. As such the research utilises participant stories and personal reflections alongside interview transcripts. This approach allows for 'deep insight and understanding of the concealed meanings of everyday life experiences' (Robson, 2011 p.151), focusing on understanding the 'essence of meaning' behind the experiences (Creswell, 2007 p.78). An interpretative phenomenological approach therefore prioritises the personal experience, helping to uncover the deeper meaning behind everyday experiences such as gardening.

3.2.2. Research Strategy

The following research strategy gives an overview of the relationship between the research approach and design, outlining the epistemological and ontological considerations that have been taken into account (Bryman, 2004).

In support of a phenomenological approach, an interpretivist epistemology and constructivist ontology was taken in recognition that there are multiple interpretations of an individual's reality. An interpretivist epistemology reflects the fact that 'human action is meaningful' (Bryman, 2004 p.14) and as such, how people interpret the world is grounded in these meanings. This study seeks to understand the meanings that the participants apply to experiences such as gardening. A constructivist ontology seeks to develop a version of social reality by building it up from the perceptions and actions of those involved. This approach identifies that gardening and spiritual wellbeing are socially constructed and, as such, individuals as social actors continuously redefine their meaning. Consequently these phenomena do not have an 'existence that is independent of social actors' (Bryman, 2004 p.16) and therefore this study seeks to

understand gardening and spiritual wellbeing through the perceptions and actions of those involved.

3.2.3 Research Design and Aim

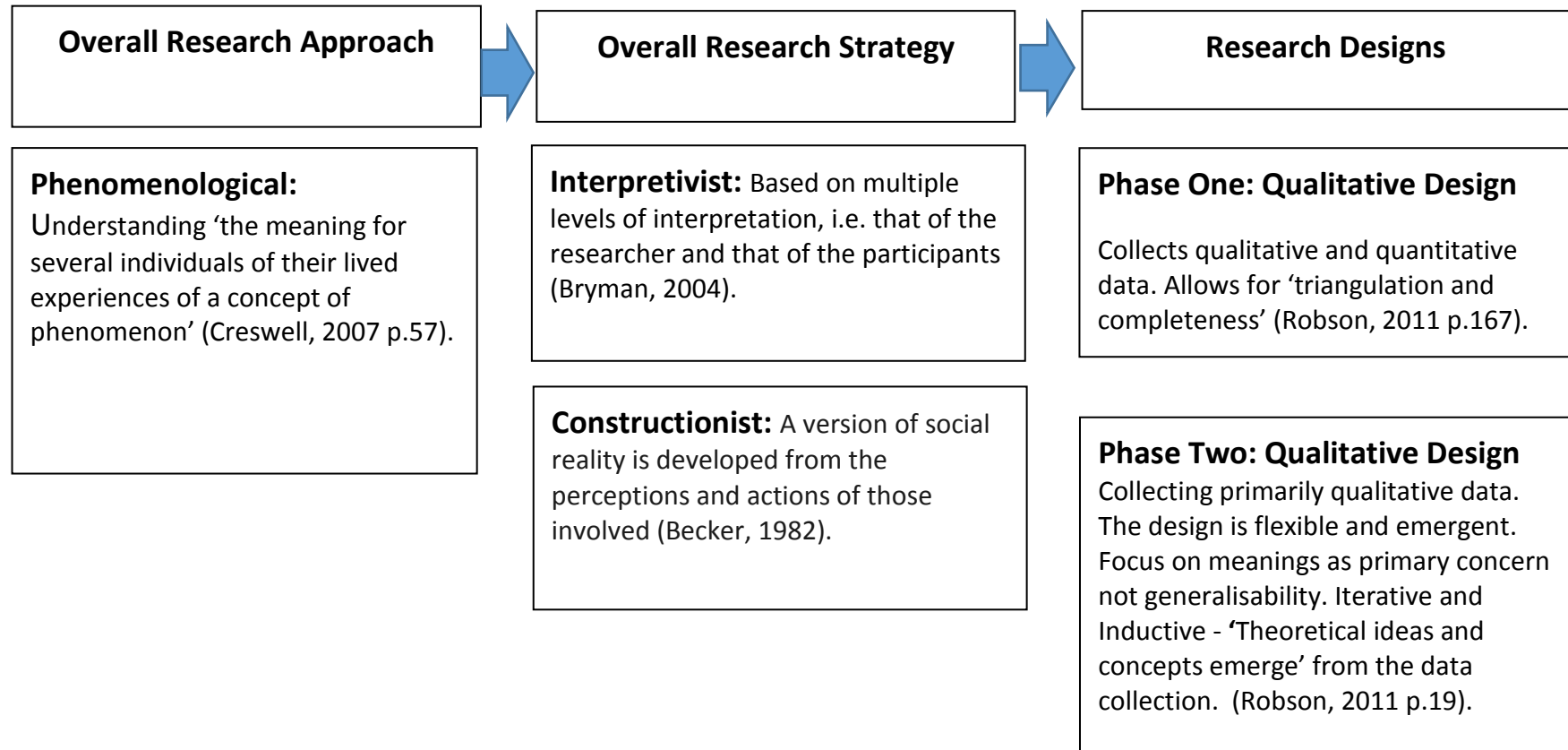
A research design offers a structure for gathering and analysing the data and is underpinned by the overall research approach and strategy (Bryman, 2004). The research design for this project has followed an evolving iterative process. This has meant that the data has been collected in two phases and as such uses two tailored designs. The chapters describing these phases offer a more detailed overview and discussion of the research designs applied in each.

The research aim was to explore how spiritual wellbeing experiences may be enhanced through interaction with nature via gardening. By utilising the word “explore’ as opposed to ‘examine’ as a key term in the research aim, the study lends itself to primarily qualitative data collection.

In order to explore the experiences of a wide range of gardeners, the research phases focussed around different participant groups. The first phase thus collected data from primarily community gardeners of faith whilst the second phase collected data primarily from home gardeners who did not necessarily follow a particular faith.

Figure 3.2: Research approach, strategy and methodology

Research Aim: Explore how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners.



3.3 Spiritual wellbeing and nature interaction methodologies that have informed the study

This research sits within multiple fields and as such is methodologically diverse. A review of the literature provided a range of research approaches and methods for consideration. The methodologies selected for Phase One and two are justified below in reference to current practice in the field.

With wellbeing currently high on the political agenda, much wellbeing research is driven by interest to inform government policy. As such it focuses around quantitative measures used to generate generalisable results; thereby studies tend to aim for large sample sizes and use validated, reliable scales to assess wellbeing (NERC, 2013; ONS, 2014). Studies that focus solely on spiritual wellbeing tend to be less driven by a need to inform policy, but still often involve large scale studies and primarily quantitative measures. Some quantitative measures include a religious aspect, such as the Spiritual Wellbeing Scale (Ellison, 2006) and the Spirituality Scale (Delaney, 2005). In contrast, others offer non-religious measures of spirituality and include aspects of life such as connection to nature as being reflective of spirituality (Elkins, 1988; Reker, 2003).

Quantitative studies offer replicable, generalisable findings, consolidating the individual experience by asking participants to allocate their experience to a predetermined understanding (Bryman, 2004). In terms of the benefits of nature interaction, objective measures of physiological responses such as stress levels (Van Den Berg & Custers, 2010) and self-report surveys using Likert scales (e.g. Hefler et al., 2009; Howell & Passmore, 2013) are commonly used.

Self-report measures do not necessarily reflect actual behaviours and a certain amount of respondent bias could be evident as individuals may wish to provide a socially desirable response (Tarrant & Cordell, 1997). This may not be an issue in all cases, and some research suggests that social desirability appears minimal in self-report research regarding environmental behaviours and attitudes (Milfont, 2009). Regardless, this study attempts to mitigate this possible issue by focussing on qualitative data which asks participants to report on their actual experiences of nature whilst gardening.

These experiences are then explored for evidence of increased connectedness to nature, for example, through increased empathy. It is hoped such an approach may provide a more representative overview of the relationship between connection to nature and wellbeing.

The Phase One objectives focussed on understanding whether gardeners demonstrate a connection with nature. Nature connectedness measures seek to quantify the relationship between humans and nature at a trait level. Such measures help to understand this connection further and explore associated benefits such as individual wellbeing (Howell et al., 2011) and pro-environmental behaviours (Nisbet et al., 2009). Some example measures of nature connectedness include the Connectedness to Nature Scale (CNS) (Mayer et al., 2004), the Nature Relatedness Scale (NRS) (Nisbet et al., 2009) and the Love and Care for Nature scale (LCN) (Perkins, 2010). These are primarily quantitative self-report measures. In these scales, participants are given a list of statements to read and complete, reflecting to what extent each statement reflects their feelings and responding on a Likert scale (Tam, 2013). The quantitative data collected in this study utilised the CNS and focussed on the measurement and quantification of participants' connectedness to nature. The quantitative data developed the study methodologically, helping to identify suitable measures, or a lack thereof, for Phase Two. The focus for measurement on connection to nature as opposed to spiritual wellbeing was taken to begin to identify what type of relationship, if any, existed between gardeners and nature. Once this was better understood, Phase Two then assessed whether this relationship (or something else) reflected any elements of spiritual wellbeing.

Phase Two sought a greater exploration of the topic and as such required more detailed, personalised responses from participants around their gardening experiences. As such, when considering the design for Phase Two, validated quantitative measures (Ellison, 2006; Delaney, 2005; Reker, 2003) were considered inappropriate in addressing the phase's objectives. This was primarily because such measures require participants to fit their personal understanding and experiences into

pre-formed categories, thus seeking similarities as opposed to individual meanings. Therefore based on the lessons learnt in Phase One, Phase Two followed a purely qualitative design.

Studies that take a qualitative approach are also utilised in studies exploring nature-interaction alone, and the spiritual wellbeing nature-interaction relationship. In terms of nature interaction, such studies help to better understand the individual experiences of nature relationships and nature-based activity by exploring the personal meaning attributed to such encounters (Bernardini & Irvine, 2007; Irvine et al., 2013; Wang & Glicksman, 2013). Studies that explore spiritual wellbeing and nature-interaction typically utilise qualitative methods as they focus around smaller sample sizes and a more personalised perspective (Heintzman, 2000; Fredrickson & Anderson, 1999). Such studies are less concerned with definitive meaning and measurement, focusing instead on relating the personal experience and understanding of spiritual wellbeing (Fox, 1997; Unruh, 2000, 2011).

Qualitative studies explore the individual experience and, in the case of activities such as gardening, this facilitates a greater understanding of the individual meaning that each participant interprets from it, which is impossible to achieve utilising a solely quantitative framework. Methodologically, qualitative data are often collected through observations, in-depth interviews and focus groups, gathering first-hand perspectives and experiences from a small number of participants (Infantino, 2003; Snell & Simmonds, 2012). Whilst the findings of such studies are rarely generalisable, such an approach offers valuable insight to help understand and conceptualise complex and subjective topics such as spiritual wellbeing.

Both quantitative and qualitative approaches offer useful insight into the field of spiritual wellbeing and nature interaction, triangulating both the shared and personal experiences to give a holistic overview. However, the difficulties encountered in Phase One (as discussed in chapter 4) indicate that overall, the research aim and objectives are best pursued in this study through qualitative research. Consequently the majority

of the data collection in this study focuses on qualitative data and understanding the meaning behind participants' experiences.

3.4 Ethical Considerations

The primary ethical consideration in this study was that of 'observation of and involvement in human behaviour' (ESRC, 2015 p.11). When collecting data from participants, observation and involvement is unavoidable and as such certain ethical guidelines must be followed. Social research relies on the willing participation of members of the public and negative experiences may hinder or prevent future research. As such, ethical guidelines not only protect both the participants and the researcher from harm but also maintain the integrity of the field. In this study, participants were approached and the data collected in a respectful, appreciative and transparent manner.

3.4.1 Ethical Procedures Used

Prior to agreeing to take part in the research, all participants were given and asked to read an information sheet about the project. This information sheet provided a clear overview of the research objectives to allow the potential participants to make an informed decision about their involvement (Appendix A). Prior to any data collection and once any questions or concerns had been addressed, participants were asked to sign a consent form (including opt out and withdrawal options) (Denscombe, 2002) (Appendix A). This consent form, which also included an outline of the confidentiality procedure, was then signed by both parties with a copy given to the participant.

To protect the views and opinions of participants and ensure they were only utilised for the purposes outlined in the information and consent forms, confidentiality procedures were followed. Each participant was allocated an interview number to ensure that they would not be identifiable by anyone other than the researcher. Additional ethical considerations to be addressed included the recording and transcription of data, confidentiality and the secure storage and destruction of data. In order to address these issues data collected were kept confidential and electronically

stored on password protected databases. Any paper based data were stored in locked desk space at the university in a room accessible by swipe card only.

3.4.2 Personal safety

Field researchers working alone should ensure their own safety and minimise any risk of harm (Social Research Association, 2003), so a number of measures were taken to achieve this for this study. One-to-one meetings took place where possible in public areas or outdoors, with clear access and exit routes. In situations where data were collected in a participant's home, contact details were left in a sealed envelope (to protect participants' anonymity) and given to my next of kin. These details outlined the location, time and date of the interview alongside a contact emergency telephone number and the proposed finish time. Once the interview was completed, the information was destroyed.

3.5 Validity of Methodology

As Phase One collected both quantitative and qualitative data, it faced differing challenges in terms of its validity, reliability and generalisability (Guba & Lincoln, 1994). In terms of quantitative data: validity reflects the accuracy of the results; reliability addresses whether the research can be repeated; and generalisability is the extent to which those findings are applicable more widely (Robson, 2011). By using a validated measure (i.e. the Connectedness to Nature Scale), the findings were considered to have a good level of validity and reliability. However, generalisability was weak due to problems with participant error and sample selection that were encountered. For example, there was some inconsistency in participants' responses and the sample chosen reflects a specific group. As this study is less concerned with generalisability, and seeks instead to better understand the individual meaning behind experiences, Phase Two sought to collect solely qualitative data.

With a flexible qualitative design as applied in Phase Two, various measures were taken to ensure the auditability, authenticity and trustworthiness which reflect validity and reliability in qualitative data (Miles & Huberman, 1994, Yardley, 2000). To support the reliability of the study, auditability was managed via an audit trail of the project

which included budget and project reports and a researcher's diary of the research journey. To support the validity of the research, authenticity and trustworthiness of the data were addressed through both participant validation and triangulation of research techniques, allowing for greater accuracy and transparency. In order to address the layers of multiple interpretation (Bryman, 2004), participant validation was utilised in Phase One to establish the ongoing validity of the data. This involved all nine participants being asked to comment on summary documents of the data, to determine whether they felt it accurately reflected any or some of their experiences of gardening and of spiritual wellbeing (participant validation was not utilised in Phase Two).

Data were triangulated by utilising a range of data collection tools and analysis methods. Initial Coding (Gibbs, 2007), Narrative Inquiry (Riessman, 1993) and Thematic Analysis (Braun & Clarke, 2006) were used to analyse the data from multiple perspectives. Initial coding begins the analysis process by identifying initial and emergent patterns/themes in the data. Narrative Analysis explores the data at a deeper level, i.e. by engaging with the stories told in participants responses. Thematic analysis brings together, develops and refines the key themes of the data as identified across the various stages of analysis. This triangulation of analysis techniques adds validity to the analysis process and captures multiple perspectives surrounding the same phenomenon. Discussion of findings and consideration of the data with research supervisors (individually through comment on documents and collectively at research supervision meetings) also helped to incorporate multiple interpretations of the data.

Transferability and fittingness are two additional aspects that reflect issues of external validity. Primarily they are concerned with the sample taken for the research and if it is replicable or applicable to other settings (Miles & Huberman, 2004). In this study these issues are perhaps the most difficult to address as the participant sample recruited by snowball sampling does not lend itself to comparison.

Snowball sampling uses participants currently involved in the research to recommend other potential participants. Whilst a common and effective approach, snowball

sampling requires some caution and recognition of the fact that it can lead to 'respondent bias and reduced representativeness' (Robson, 2016 p.167). However, this approach also allows the researcher to use their discretion when selecting participants in order to provide data on specific individual experiences (Cresswell, 2007) and as such may be able to manage issues of bias and representativeness. There are concerns with snowball sampling and utilising gatekeepers to identify contacts, but despite these issues, the sample taken in the present study was relatively wide-scoping for its size and maximum variation sampling (Miles & Huberman, 2004) has sought to reduce elite bias.

3.6 Summary

This chapter has offered an overview of and justification for the overall research approach, strategy, design and methods used throughout the research. Taking a phenomenological approach, the study seeks to understand the gardening experiences of participants and as such utilises multiple forms of data collection and analysis. Various ethical considerations have been identified and addressed to protect both the participant and researcher. The next two chapters – Chapter 4 and Chapter 5 – provide greater methodological detail for and presentation of results from the two research phases respectively.

Chapter 4: Faith-based community gardeners' understanding and experiences of spiritual wellbeing – Phase One

This section offers an overview of Phase One, the samples and settings, the data collection tools and the analysis processes employed. The chapter moves on to provide an outline and discussion of the findings and concludes with a reflection on how this data helped to develop the evolving study.

4.1 Overview

The overall research aim of exploring how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners was addressed in Phase One through objectives 1 and 2. A variety of data collection approaches and methodologies were employed to best meet these objectives.

Table 4.1: Phase One objectives and methods

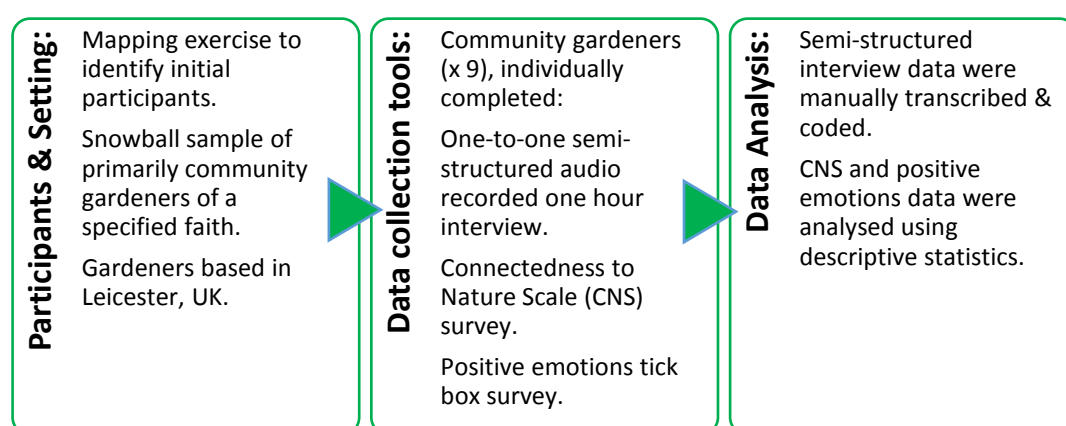
Phase One Objectives	Chosen Methods
1. Understand whether gardeners demonstrate a connection with nature.	Quantitative survey: Connectedness to Nature Scale (CNS) Trait survey and a positive emotions tick box survey to be self-completed by participants prior to interview. Qualitative interview semi-structured questions based around the potential relationship with nature developed through gardening.
2. Investigate meanings of spiritual wellbeing and identify some of its key features.	The review of the literature helped to ascertain some of the basic features of spiritual wellbeing i.e. meaning and purpose. These features were then used to form the basis of some of the interview questions regarding gardening activity, to highlight if any of these features are present.

Phase One addresses the research aim through the collection of both quantitative and qualitative data with primarily community gardeners of faith. These participants and settings were chosen for methodological and theoretical reasons beneficial to the progression of the research as outlined in section 4.2. Figure 4.1 provides an overview

of Phase One, summarising the initial choices made for participant sample, data collection tools, and analysis approaches). These intended choices evolved as the research was carried out, in accordance with the iterative approach outlined previously. The discussion that follows offers an overview of the final process and some discussion in support of the approaches taken and the alternatives considered.

Figure 4.1: Phase One Research Overview

Research Aim: Explore how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners.



4.2 Methods

4.2.1 Participants and Setting

Phase One used snowball sampling as a form of purposive non-probability sampling (Bryman, 2004). The participant sample for Phase One consisted of primarily community gardeners who identified with a specific faith group.

4.2.2 Why gardeners of faith?

The literature review outlined the contested nature of the word ‘spiritual’ and its perceived links to faith in popular culture which cannot be ignored. The wellbeing literature indicates that faith appears to play a role in overall wellbeing, with individuals that have faith in their lives reporting high levels of wellbeing (Perry, 1998; Ellison, 1998). In terms of physical wellbeing, some faith-based principles support a healthy lifestyle by endorsing health promoting behaviours such as low alcohol

consumption and safe sex (Frankel & Hewitt, 1994). With regard to mental and social wellbeing, a sense of faith may help individuals to feel supported in their daily lives, thus lessening feelings of depression and isolation (Myers, 2000). Faith is also identified as a factor in spiritual wellbeing (Whitford & Olver, 2012), although there is little evidence to suggest that following a faith enhances or develops it specifically. This may be due to the fact that spiritual wellbeing and religion are difficult to define and understand and as such difficult to correlate (Bredle et al., 2011). The links between faith and wellbeing as well as spiritual wellbeing and faith may benefit from being investigated further.

The terminology 'gardeners of faith' was utilised with participants as opposed to 'religious gardener' as it was thought that by using faith phraseology it avoided excluding non-doctrine based practices and include beliefs reflective of wider spirituality (Zinnbauer et al., 1997). As such keeping relatively open terminology helped in the purposeful recruitment of participants who identified with a faith, but did not necessarily follow a religious doctrine.

Gardeners that identify with a specific faith were seen as being potentially able to contribute valuable perspectives to this study in a number of ways. Firstly gardeners of faith may be more open to, and expressive in, their discussions of spiritual wellbeing due to their familiarity with terms such as spiritual. Secondly, gardeners of faith may be more open to identifying and understanding spiritual wellbeing experiences and how they may be currently expressed in their gardening activity. Primarily, their input was sought to highlight any specific aspects of gardening that support spiritual wellbeing, and also whether following a faith is a necessary component in identifying and developing it. It is important to note, however, that this study does not specifically focus around whether faith develops spiritual wellbeing; rather, discussions with faith-based gardeners were viewed as offering a pathway into beginning to understand the concept further.

4.2.3 Why community gardeners?

Initially just community gardeners were envisaged as being the sample group for Phase One. It was thought that separating out community and home gardeners into two phases would allow for a comparative picture of their separate aspects to be shown. However, early interviews identified the fact that some community gardeners also worked on their home gardens (3/9). The contrasting experiences of both community and home garden settings were therefore both expressed throughout Phase One.

4.2.4 Participants and setting: Mapping Exercise

To identify potential faith-based community gardeners, a mapping exercise which involved identifying faith groups with gardens or outside space suitable for gardening in the Leicestershire area took place. As faith-related buildings are attended by a committed community at least once per week and many of these venues have some form of outside space, these were initially identified as a starting point. In order to identify potential gardening sites, a Google satellite map of the area local to the university (to aid accessibility) was used to highlight nearby churches and faith centres. These centres were then listed in order of suitability, prioritising locations with secured outside green space. Once possible sites had been highlighted, these were then shortlisted again in terms of groups that included gardening

Researcher Reflection - The initial stages of the project were directed not only by the research aim and objectives but also by funding requirements. As such the project sought to meet a wide range of outcomes. This provided beneficial experience of managing not only a research project, but also the expectations of the stakeholders involved. It also caused issues in terms of membership roles (Adler et al., 1987) as I sought to juggle a variety of roles that were not always complementary to each other. For example, some groups wanted gardens establishing and I became a garden designer and trainer and as such was seen as a gardening expert. This was not conducive to the data collection as some participants felt that I was the 'expert' and their opinions were not informed or valuable.

or the importance of nature in their belief system, this was to tap into established interests and increase possible uptake. In the first instance, this mapping exercise highlighted six potential groups.

First contact with these groups was made via individual e-mail with a gatekeeper, which offered a more personal approach and demonstrated that they had been purposefully selected as opposed to being canvassed. It was also thought that this approach would be beneficial in contacting those faith groups on the margins of the community, as a general web-based call for interest may have only engaged groups already involved in similar projects. However, after one month with no responses from the selected groups, the details of the project were also sent to local community, environmental and faith groups to be advertised on their websites. Three faith-based groups responded to the request for participants and were able to take part in the project as they either already had gardening space or were prepared to create some in collaboration with the project.

4.3 Data collection Tools

Whilst overall this is a qualitative study in design, a small amount of quantitative self-report survey data were collected. These data were collected in order to utilise measures of nature connectedness and frequency of positive emotions with gardeners to examine their future usefulness to the project. Qualitative data were also collected through semi-structured interviews.

4.3.1 The Connectedness to Nature Scale (CNS)

The literature review emphasized the role of connection to something “other” as being supportive of spiritual wellbeing (Schroeder, 1992; Hawks, 1994; Fisher, 2011) and also suggests that a sense of connectedness is a beneficial aspect of nature interaction (Cervinka et al., 2011; Zelenski & Nisbet, 2014). Gardening as a nature-interaction activity has the potential to offer a sense of connectedness to nature. As such measuring a sense of connectedness to nature could help to identify whether or not it is a part of a gardener’s experience.

The CNS (Mayer & Frantz, 2004) is one of many scales (Nisbet et al., 2009; Perkins, 2010) that seek to quantify the relationship between humans and nature. The CNS seeks to measure an individual's sense of connection to nature, stating that it may 'indicate that personal well-being is linked to a sense of feeling connected to nature' (Mayer & Frantz, 2004 p.512). The connectedness to nature scale (CNS) utilises a 5 point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree) with 3 being neutral (Appendix B). In comparison to other scales, the specific focus on wellbeing made it appropriate for use in this study. The CNS was utilised alongside a semi-structured interview schedule (Appendix C) that addressed the personal experiences of feeling a connection to nature. By using both data collection tools it was thought this approach would offer further understanding about how best to conceptualise a relationship between humans and nature and better understand its role in spiritual wellbeing.

4.3.2 The survey of positive emotions

The literature review suggested that positive emotions such as awe and hope are sometimes a feature in both nature interaction, and spiritual wellbeing related activities (Fredrickson & Anderson, 1999; McDonald & Schreyer, 1991). It was therefore thought useful to measure how often such emotions were experienced by gardeners to try to better understand any links between nature interaction, positive emotions and spiritual wellbeing.

A simple tick box survey of participants' positive emotions based on Frederickson's list of positive emotions (1999) was developed for this study (Appendix B). Whilst all of Fredrickson's positive emotions are usually reflected in general wellbeing models (Seligman, 2012), awe and hope are also reflected specifically in spirituality measures and spiritual wellbeing research (Meezenbroek et al., 2012; Carson et al., 1988; Fredrickson & Anderson, 1998). The focus on positive emotions in Frederickson's list also made it more appropriate for use in this study than the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988). Whilst the PANAS scale contains a negative element that may have offered an interesting counterpoint, during piloting,

many of the terms utilised in the PANAS scale such as 'alert' and 'strong' required a greater level of clarification in terms of gardening than the positive emotions outlined by Fredrickson (1999).

The survey consisted of a basic list of ten positive emotions of Joy, Gratitude, Serenity, Interest, Love, Awe, Hope, Pride, Amusement and, Inspiration (Fredrickson, 1999) and participants were asked to tick which of those emotions they encountered on a regular basis (Appendix B). More detail about each emotion was not given as it was hoped that participants would answer in terms of how they perceived each emotion as opposed to fitting their feelings into a prescribed description. The data collected offered an opportunity to examine positive emotions in relation to spiritual wellbeing and the context of gardening activity. This survey, whilst very simple, provided an opportunity to trial the measurement of positive emotions in the early stages of data collection and to explore its value as an area of potential focus in Phase Two.

4.3.3 Semi-structured interviews

Semi-structured interviews were conducted with 9 primarily community gardeners in the UK who were identified from the local gardening and faith community. The interviews were audio recorded, had a duration of approximately one hour (ranging from 48-72 minutes) and took place in most instances in the garden itself. The audio recordings were transcribed and analysed alongside the researcher's observational notes taken during the interview. Research memos were also recorded during and immediately after the interview based on additional observations (Gibbs, 2007).

The interviews were iterative in nature, mainly consisting of open-ended questions which were often adapted based on participant comments. The open-ended questions addressed the Phase One objectives and were framed around the phenomenological approach, seeking to understand the participant experiences. The questions were developed through a close examination of the literature particularly that from the field of gardening and spiritual wellbeing (Unruh 2011) and nature based leisure activities and spiritual wellbeing (Heintzman 1999, 2000). As discussed in the literature review, these studies give an insight into the aspects of spiritual wellbeing often experienced

in nature based settings and activities and as such provided areas for focus when developing the interview schedule. Interview questions were also influenced by a number of informal conversations with gardening gatekeepers in which issues were raised that were considered important for further investigation, for example, the experience of being alone in the garden. These conversations took place during the initial scoping of the study in which gatekeepers were identified and consulted regarding the project. They highlighted a wide range of gardening motivations and experiences that were also mirrored in the literature. A combination of these informal discussions alongside the literature and the influence of the chosen research approach all helped to shape and develop the interview questions (Appendix C).

Structuring the research questions based on the elements outlined not only provided context for the exploration of the nature-interaction element as outlined in the literature, but also examine the ways in which nature-interaction may be experienced by gardeners for whom this was not a priority. The interviews were semi-structured so that they were also able to acknowledge additional issues and experiences raised by participants that may not have been previously considered. The questions were designed to build in conceptual detail before addressing in-depth questions about spiritual wellbeing and gardening. They were also partially influenced by discussions with gatekeepers about the project and the literature in the field. The interviews took a holistic approach to gardening and focussed

Researcher Reflection - Discourse analysis may have proved a useful form of analysis in this study. However, the project's focus is on identifying themes and patterns between gardening groups and individuals as opposed to the practical elements of the conversation. Thus in keeping with the identified project focus and accounting for the time and resources available, thematic analysis was deemed a more appropriate analysis tool. Consideration of other approaches proved useful in this study, not only in identifying a range of options but also strengthening the case for the approaches finally chosen.

on the complete experience, not just on specific outputs such as food growing.

4.3.4 Data Analysis

The quantitative data from the CNS were analysed using descriptive statistics. The data were entered into Excel to obtain a mean rating and frequency count for each measure. The positive emotions survey results were also entered into Excel and analysed via a simple frequency count. The sample size was too small to warrant the use of further statistical analysis of the CNS or positive emotions data.

Thematic Analysis as outlined by Braun and Clarke (2006) was chosen as the form of analysis as it offers a systematic approach to analysis with a track record of use in other studies in the field, (Richardson et al., 2015, Webber et al., 2015). Thematic analysis allows for the organisation of large amounts of qualitative data whilst also allowing for a rich interpretation of the data to take place (Braun & Clarke 2006). This approach is particularly beneficial in this study as it collects a relatively large amount of data for a qualitative study but still requires a detailed interpretation and analysis. Thematic Analysis also offers the best fit for the data collected and offers the detail and exploration required by a large scale phenomenological study. The analysis of the interview data was based around the six stages of thematic analysis (Braun and Clarke, 2006). These phases involve, familiarisation, generating initial codes, searching for themes, reviewing potential themes, defining and naming themes and finally writing the report (2006 p.60). The analysis was started by undertaking a close read of the data in which preliminary patterns began to be identified and codes developed. In this study this process involved reading through the data numerous times to identify similar areas of discussion which were then highlighted as potential codes. This coding process helped to identify similarities and differences which began to form the basis of overarching themes. The thematic analysis process was continued in line with Braun and Clarke's approach and involved searching for and then reviewing the key themes within the initial codes. It was also useful at this stage to 'identify dominant themes' and remove 'redundant codes' (Saldana, 2015 p.244), as it helped to refine the data further. Once themes were identified they were clearly defined and named based on

the codes that constituted them, these codes were then refined to create the main themes of the findings.

Table 4.2. gives an overview of how the data were analysed into codes and themes. Due to the small sample size the qualitative data were coded without the use of Computer Aided Qualitative Data Analysis Software (CAQDAS).

Respondent validation was sought from participants after the initial analysis had been completed. All participants were e-mailed copies of the key findings and asked for their thoughts on whether they felt it accurately reflected any of their feelings or experiences. Responses were low (2) and there were no changes made to the data in light of this information.

Table 4.2: Illustration of the coding process of the qualitative data, supported by example quotations.

Sample quote	All Codes identified	All Themes
<i>'I talk about them (plants) as if they are independent people' (Participant 5)</i>	Connection	Relationship with nature
<i>'I couldn't live without it (the garden)' (Participant 3)</i>	Supportive/Essential role of garden	
<i>'during that time (illness) the garden was completely neglected' (Participant 2)</i>	Feedback aspect of wellbeing	
<i>'It's a partnership, you have to work in partnership with nature'(Participant 6)</i>	Partnership in growing process	
<i>'It's a memory garden for us; it's got stories to it' (Participant 5)</i>	Time/Cross generational	
<i>'it's part of the home' (Participant 1)</i>	Closeness	Community and Home gardening experiences.
<i>'In a community garden there isn't that same sense of ownership' (Participant 4)</i>	Ownership and responsibility	
<i>'It wasn't pressured...'it was a lovely atmosphere' (Participant 6)</i>	Working with others	
<i>'it's a place where I can go for a bit of peace' (Participant 9)</i>	Thinking and reflection	Spiritual wellbeing and
<i>'I understand what I need to do to make it grow but I</i>	Transcendent moments	

<i>don't understand the miracle of how all that works'</i> (Participant 8)		gardening
<i>'it's (gardening) much more personal, more of a spiritual thing...not a religious thing'</i> (Participant 3)	Spirituality and Religion in gardening	

4.4 Quantitative Findings

4.4.1 Participant Demographics

Demographic data was collected from the participants in Phase One of the study as part of the interview process. The demographic data collected centered solely on age and gender and as such gives only a partial overview of the demographic information of the cohort. The limited information does however show that the participant sample consisted of 5 male and 4 females with a large percentage being 50 years old and over (67%) with the remaining participants being between the ages of 40 and 49 years old. The restrictive and limited nature of the demographic data and the data collection process is identified as a limitation of Phase One of the study and discussed further in section 4.7.3.

4.4.2 The CNS

The results of the quantitative data collected via the CNS scale quantified the relationship between the participants and nature and showed a mean score of 3.8 (SD 1.32) thus suggesting that participants felt a slightly higher than neutral connection to nature. However, the slightly higher than neutral connection may simply reflect the increased amount of time that gardeners may spend in nature compared to non-gardeners. Therefore, whilst this result provides some indication of a connection to nature, the consequent effects of this connection cannot be explicitly measured. Caution must also be taken with this result however due to the small sample size.

4.4.3 Positive Emotions Survey

The results of the positive emotions survey indicated that when listed in order of frequency, Gratitude was the most often experienced positive emotion (8). This was followed by Love, Joy and Hope (7), then Inspiration, Awe, Interest and Serenity (6) with Amusement and Pride (5) experienced least frequently.

Gratitude as the most experienced positive emotion deserves further consideration as it is the emotion thought to be most beneficial in the building of relationships (Algoe et al., 2013). It has also been identified as an outcome in other urban nature spaces, e.g. walking through a park (Irvine et al., 2013). Acknowledgement of this emotion by the participants perhaps begins to suggest that gardening is considered a relationship between humans and nature and one that gardeners are inherently grateful to be part of. Additional illuminative data came from the respectively low reporting of the emotion of pride. This may be directly related to the research sample; for example, one participant highlighted that pride is considered a sin within their faith and as such something they would not wish to report having regular experience of.

Whilst these results gives some indication of the types of emotions experienced by gardeners, a simple ranking fails to account for the intensity or significance of each emotion. A better understanding of the intensity of each emotion and the setting or activity in which it was experienced would have provided further insight but would likely have been subject to memory recall issues. Overall caution should be taken when drawing conclusions from the data collected regarding the positive emotions survey due to the small sample size. However, despite these methodological issues, the occurrence of positive emotions is evident, and it is this capacity to experience positive emotions that helps to develop wellbeing and support flourishing individuals (Fredrickson, 2001).

4.5 Qualitative Findings

The analysis of semi-structured interviews identified three key themes; Relationship with Nature; Community and Home Gardening experiences; and Spiritual Wellbeing and Gardening. It is important to note however that these themes are interlinked and overlapping, indicating that the process of gardening includes a wide range of both contrasting and complementary elements. Outlining the three themes separately helps to parse out key areas which address the research aim and identify which themes may prove to be useful areas for examination in Phase Two.

4.5.1 Theme 1: Relationship with Nature

Much of the interview data with participants was suggestive of a relationship with nature. Whilst gardening was perceived by many as a partnership activity, the comments surrounding the gardening process seemed to reflect a deep relationship with nature. This relationship was reflected in the codes outlined below.

Connection

Overall the CNS data measured an above average connection with nature in most of the participants and the occurrence of positive emotions suggests a sense of connection through experiences of gratitude and love towards an Other. The interview data offered a deeper understanding of this sense of connection and helped to place in context some of the quantitative data. Some participants commented that they talk to their plants and view them as friends in the garden with their own personalities. In most instances wildlife in the garden was seen as a form of companionship which provided a source of great joy and was actively encouraged. Whilst in some instances the relationship was deeper still with wildlife being seen as part of the garden family, actively searched for and supported; *'Birds are our outdoor pets' (participant 5)*. Instances of contact with wildlife also seemed to develop occurrences of positive emotions such as joy and interest. Visiting wildlife also offered insight into the broader ecosystem and connected participants cognitively to the wider natural landscape.

Supportive and essential role of garden

Participants discussed how the garden was an essential part of their life and that their gardening activity helped to support and enhance them as individuals. When contemplating life without a garden most participants seemed bereft and unable to consider not having access to some sort of outside personal space; *'I don't think I would be a complete person without it' (Participant 4)*. Thus gardening was perceived as more than a pastime, but something necessary to their day-to-day life enhancement. The garden as a space was also perceived as a supportive environment, one that not only helped to enhance their lives but also support them through difficult times.

'Some of the worst times in my life ... I have gone back to get my hands in the dirt... it's grounding' (Participant 3)

The garden and gardening offered a constant companion in and activity through which participants could lose themselves, meditate or even express negative emotions such as frustration through the more physical tasks.

Feedback aspect of wellbeing

In terms of gardening, the interviews suggested that wellbeing seemed to contain an element of feedback. Many participants stated that when the garden looked good they felt good and when it looked bad they felt bad; *'We haven't had the flowers form... it makes me feel a bit sad' (Participant 5)*. The wellbeing of the garden and that of the gardener seemed to be intrinsically linked, with the garden often being neglected during difficult times. Instances of neglect were not simply linked to lack of time but participants stated that their hearts weren't in it and they tackled jobs in a 'halfhearted' way when feeling low. Reflecting on times when the garden was poorly maintained mirrored times in their life when things were difficult. It would therefore appear that the relationship between gardener and garden is intrinsically linked and when one flourishes so does the other.

Partnership in growing process

Nature was seen as an integral part of the growing process, with all participants discussing how important it was to work with nature; *'I can't do it (grow things) on my own!' (Participant 1)*. The growing process was identified as not only a partnership but also very tenuous with nature playing a controlling role. This was welcomed by some who revelled in the fact that in this facet of their lives they had no control. However, others identified that the partnership with nature was a constant battle for control in which they felt relatively powerless. The issue of control raised discussions around the negative aspects of the human-nature relationship in gardening, i.e. when crops fail and pests take over, highlighting that the sense of partnership with nature was not always one of camaraderie and support. A counter narrative existed in some of the participants' responses expressing this, for example, one participant reported that a

key perspective of their faith was to acknowledge that, *'I am working against it (Nature) as natural man is an enemy to God'* (Participant 4). Nature was identified as something to be battled against, natural man was an aspect of this natural world and as such something to be controlled and subdued. Nature was identified as something to be worked against with weeds seen as reflective of *'the bad side of nature'* to be combatted like *'fighting off an infection'* (Participant 4). Others also reported that they felt gardening was not really a partnership but that nature was primarily in charge and, as such, gardeners were at the mercy of natural processes,

'Mother Nature will have the last laugh...If you get too big she will slap you down' (Participant 7).

These perspectives highlight that whilst the participants acknowledged nature's role in the growing process, their role in that process was less one of partnership but more focused around bringing order and control to a disorderly and at times destructive force; or to be at the mercy of that force.

Despite this recognition of the negative aspects of a human-nature partnership, many reported that negative experiences helped to develop their character as a gardener, teaching them lessons in patience and pragmatism; *'You learn to accept that things go wrong sometimes'* (Participant 5). The different paradigms that gardeners work within, from a biodiversity focus through a perceived need to control nature, highlights the range of relationships experienced. The recognition of these relationships and their negative aspects is suggestive of an authentic relationship between humans and nature that is not perfect and reflects the difficulties often experienced in human relationships.

Time

The concept of time in the gardening process was highlighted by participants identifying that the relationship between humans and nature was often cross generational. A number of the participants talked about taking part in gardening as a child and their parents and grandparents teaching them not only skills but also an

appreciation for nature; *'I learnt from my grandparents' (Participant 4)*. Sharing this knowledge offered a strengthening bond for some of their human relationships too, with many keen to pass on skills to their children and grandchildren.

'My grandson will come pick a tomato rub it on his shirt and just eat it... that's how it used to be' (Participant 7)

The concept of gardening has changed little over time and as such it offers a feeling of consistency in a changing world, with much of the knowledge they hold standing the test of time. The reflections on time also identified the need for flexibility in the human-nature relationship with both gardener and garden space being adaptive to the life phase. Some participants who gardened from home highlighted the fact that their garden had changed over the years, in some instances changing from a play space for the children to a growing space for food through to a contemplation/relaxing space. In some instances participants reported this sense of shared history as giving them a heightened perception of emotional connection to the garden.

4.5.2 Theme 2: Community and Home Gardening experiences

Participants' comments that focussed on community gardening identified that it was often not their preferred setting, with home gardening being seen as the ideal situation. When reflected on alongside theme 3 'spiritual wellbeing and gardening', these findings help to identify which garden settings might be more conducive to developing spiritual wellbeing and this is discussed further under theme 3.

Closeness

Both personal closeness and closeness in terms of proximity was highlighted as a beneficial feature of gardening. Consequently this code was reflected primarily in terms of home gardening and highlighted not only the sense of proximity felt to gardens that were personally owned, but also a personal closeness that participants felt to the garden. In terms of physical space, being able to walk out of their house into a personal outside space was very important for some participants.

'It's important to be able to easily walk out of the house and sit somewhere privately... I do like privacy in the garden' (Participant 5)

Proximity not only made gardening tasks easier but also allowed participants access to the site at any time. Late evening and early morning were particularly popular times to visit the garden for reflection and participants noted that community gardens were not always accessible at these times.

A sense of personal closeness was also reported by those who also gardened from home and this reflected the connection felt to their own gardens. For some the space was very reflective of their personalities and for those gardeners this is one thing they felt they was lacking in community gardens, stating that compared to a home garden *'a community garden doesn't feel so personal to me' (Participant 7)*. For these participants, community gardens were described as something they engaged with when they were unable to access a personal garden.

Working with others

Working with others was an issue raised by most participants as being detrimental to their enjoyment of the gardening experience. Gardening was seen as an endeavor in which one could get some personal space. Participants commented on enjoying the fact that gardening offered, *'peace and solitude... somewhere quiet' (Participant 9)*. Whilst some participants reported that community gardens offered a pleasurable environment, sharing the growing process and garden space with other people was not necessarily considered a positive thing. Other people in the space necessitated socialising; *'(In the community garden) you wouldn't necessarily be on your own' (Participant 5)*. This shared space alongside a sense of communal management of garden tasks, was perceived as counterproductive to the peaceful aspect of gardening. For those participants who also gardened at home, even their own families were not always welcome in the garden, with it often being thought that *'they get in the way' (Participant 4)*, although many enjoyed sharing the process with their children. In terms of sharing gardening tasks and managing the workload, community gardens

were often described as a hotbed of discontent; *'Committees don't work very well ...people doing their own thing in a very uncoordinated way'* (Participant 2).

Most of the negative comments regarding community gardens were based on experiences of other community gardens than those participants were associated with. In contrast, participants also commented on how well organised their own community garden was. The management of tasks was also seen as unproblematic, with one participant reporting that they enjoyed being allocated tasks as it stopped them becoming overwhelmed.

Overall, community gardens were not perceived as the ideal gardening setting. Participants reported that they primarily enjoyed gardening as an individual endeavor and that the one-to-one relationship they developed with the plants and the garden itself strengthened their commitment and connection to it.

Ownership and Responsibility

The interview schedule (Appendix C) specifically addressed issues of ownership and responsibility in order to better understand the type of relationship gardeners had with their garden, e.g. one of care and love or duty and obligation. All of the participants who also gardened from home thought it important that they owned their garden and overall they liked the sense of consistency that ownership offered.

'it's important that what you did still stands, no one will come along and do other things' (Participant 3)

In terms of community gardens, there appeared to be a shared perception that due to a lack of ownership the garden could be taken away from you at any time.

'With those spaces (community gardens) you've got no rights, a builder comes along and says we are taking that' (Participant 7)

Ownership of a personal garden however gave participants a sense of individual investment in each growing season and the space overall.

In terms of responsibility for both personal and communal gardens, this was discussed by some as a sense of guardianship, *'We are kind of stewards of it (the Earth) we need to take care of it' (Participant 4)*. Many were mindful of passing on land that had been well cared for to future generations.

'You look after it while you are here and when I'm gone someone else will look after that piece of land...You are here to maintain it for the next person' (Participant 7).

This sense of guardianship reflected the responsibility felt by some of the participants. This was not in a dutiful sense but in terms of maintaining something that may offer pleasure to future generations.

A sense of responsibility was also felt in the partnership aspect of the growing process; many did not want to let their side of the process down by making mistakes. In terms of community gardening, this was also felt in terms of the rest of the group, with some worrying that they don't have a wide enough range of skills to feel they contribute effectively. Although one gardener who had undertaken lots of community garden work indicated that this was not important, *I don't have any formal education, but it was the enthusiasm they were interested in' (Participant 6)*. These findings suggest that experiences of community gardening differ considerably from garden to garden and from home-based experiences of gardening.

4.5.3 Theme 3: Spiritual Wellbeing and Gardening

Phase One did not ask participants to define 'spiritual wellbeing' but focussed instead on how their gardening experiences may be conducive to developing it and experiences of spiritual wellbeing features such as transcendent moments. This kept the discussion open and encouraged participants to explore unusual and non-obvious aspects of their gardening experiences. This approach also began to identify the most useful language and terms with which to talk about spiritual wellbeing.

Thinking and reflection

Participants reported that gardening offered a space for peace, and quiet contemplation; *'It's a place to meditate and pray'* (Participant 7). This was considered important as it allowed the mind to wander and the focus to shift to less practical matters.

The perceptions of some gardening settings by participants were strongly influenced by their personal experiences. Some participants perceived their garden in a way that did not truly reflect the space, for example, in one community garden site at the side of a noisy road a participant reported that once inside; *'This is my little haven...when I close that door I don't even hear the traffic'* (Participant 7). The garden and gardening process therefore appears able to create an environment and a focus that shuts out the noise and stress of everyday life, offering a physical and mental sanctuary. Urban nature spaces such as community gardens and allotments in reality are often subject to traffic noise, but in this instance are perceived as quiet, peaceful and conducive to reflection and meditation. This quiet reflection time was also deemed to be good for wildlife interaction, with participants indicating that quiet and stillness in the garden brought out the wildlife and as such offered the opportunity for another relationship to be developed.

Transcendent moments and positive emotions

Transcendent moments appear to be a feature of spiritual wellbeing as they imply a link to or experience of a non-tangible other/event or something outside of the everyday (Hood-Morris, 1996; Reker, 2003). As such, identifying instances where gardeners felt a transcendent moment may be a way of highlighting spiritual wellbeing in areas where it has not been specifically expressed by participants.

Initially, it was difficult to speak to gardeners about the less practical aspects of gardening. The practical nature of gardening offered an easier, more accessible conversation topic and as such most interviews began this way. Consequently in some instances it became very difficult to move from this and it became clear that the non-practical aspects of gardening were seldom discussed. Many gardeners reported that,

whilst they experience transcendent and spiritual moments, they are rarely at the forefront of their mind. They referred to these experiences as much more subconscious,

‘There is quite a deep spiritual element to it, but that’s not always necessarily going through my mind’ (Participant 4).

As such it is important to note that spiritual experiences required explicit prompting and discussion as sometimes even the gardeners themselves are unaware of the experiences they have encountered.

When speaking about spiritual experiences and transcendent moments, participants tended to talk in terms of positive emotions as opposed to religious phraseology. Expressions of positive emotions such as awe, inspiration and hope were common when participants were discussing the growing process and their feelings about gardening; *‘It’s the wonder of life really... the wonder of nature... it’s absolutely amazing’ (Participant 5)*. Positive emotions were often used to express aspects of the gardening experience and these discussions provided additional information about gardeners’ experience of positive emotions to the information gathered in the tick box survey. Positive emotions were particularly expressed when discussing nature and the growing process, indicating perhaps that this aspect of gardening is the most effective at developing these emotions.

Whilst not all gardeners expressed a close partnership with nature, for those that did, the relationship appeared to provide a vehicle through which transcendent moments could be experienced. The wonder of the growing process and the connection felt in the partnership with nature appeared to heighten awareness of the transcendent aspect of life, although whether this makes gardeners more susceptible to such moments cannot be determined.

Spirituality and religion in gardening

Perhaps unsurprisingly due to the sample, there was a strong religious and spiritual undertone to discussions about the role of nature. Some participants referred to

nature as part of God's work and to gardening as providing an opportunity to develop a relationship with their creator; *'There is a spirituality, a closeness to nature and God by being in the garden'* (Participant 6). A few participants went even further and explicitly linked their gardening experiences to their faith, identifying the garden as a form of outdoor church in which they could contemplate and worship; *'Where was Jesus's church? Outdoors! And if it's good enough for him'* (Participant 7). Another participant stated that gardening was a conduit through which to experience their religion, with gardening activity making them feel closer to their God and their role on the Earth,

'It (gardening) makes me feel closer to my God and that I'm taking more responsibility for the Earth that we have been given' (Participant 8)

Despite the use of some religious terminology, most reflected that the spiritual side of gardening they experienced was not related to any sense of formal religion or faith;

'It's not a church, sacred thing but there is a spirituality or a closeness to nature and God' (Participant 8).

Some gardeners of faith reported that one did not need to be religious to experience and identify these spiritual moments, suggesting that simply partaking in the growing process often engendered a spiritual side;

'People who have an interest and enthusiasm with growing things, they tend to have a bit of a spiritual side with them' (Participant 6).

This sense of the spiritual was linked in many ways to the experience of gardening, this was reflected by one participant who expressed that,

'Gardening is an act of faith...if you didn't think it would grow you wouldn't plant it... it shows me how dependent I am on a higher power' (Participant 7).

The process of growing involves an unknown element, a belief in something out of one's control and a link to nature or something other than oneself through a dependence on a higher power. All of these features of the gardening experience were reflective of aspects of spirituality for many of the participants.

Consequently, whilst discussions around terms such as spirituality and spiritual wellbeing highlight its wide ranging definition amongst Phase One participants, the underlying features of gardening seemed to reflect aspects of spirituality supportive of features of spiritual wellbeing.

4.6 Meta-themes and links to Phase Two of the study

The findings from Phase One pointed to a range of meta-themes drawn from the set of initial themes highlighted in section 4.5. Some of these directly addressed the research aim whilst others brought new considerations which helped to shape the next stage of data collection. This section offers a discussion of these meta-themes which comprise: The human-nature relationship; The role of positive emotions; Faith, Spiritual Wellbeing and Nature interaction and Community garden settings and spiritual wellbeing.

4.6.1 The Human-Nature relationship

As highlighted in the literature review, gardening is one of the few leisure activities that can be clearly identified as a partnership between humans and nature. Whilst the findings suggest that some participants felt a connection to nature, they also highlight specific features of this connection such as feelings of care and responsibility that are conducive to developing spiritual wellbeing (Ellison, 1983; Bensley, 1991; Hawks, 1994; Westgate, 1996; Fisher, 2011). Some faith-based participants referred to gardening as a spiritual partnership activity as opposed to nature partnership activity, but often referred to nature as a work of God and as such an important part of that partnership. The findings also suggest that some aspects of gardening develop a relationship with nature that moves beyond a working partnership, into one that mirrors many of the wellbeing benefits highlighted in human relationships. Some participants even talked about their gardens as having almost human-like qualities. This close relationship as

reflective of a sense of connection may play an important role in the development of spiritual wellbeing and is addressed further in Phase Two.

The counter narratives reflected in the findings regarding the human-nature partnership suggest that whilst a sense of relationship appears to be present in the growing process, it is not always solely reflective of a positive relationship. These participants' experiences provide a valuable alternative perspective, which helps us to better understand the human-nature relationship as expressed through gardening. As such, Phase Two also identifies counter narratives and the value of additional counter perspectives portrayed by participants in giving a rounded perspective of the human nature relationship.

4.6.2 The role of positive emotions

In both the tick box survey and during the interviews, participants identified positive emotions that they experienced on a regular basis. Whilst the survey results do not identify whether gardening develops these emotions, participants did refer to emotions such as joy and hope to express their experiences of gardening during the interviews. Many of the positive emotions expressed by participants during their interviews and those identified on the tick box measure such as gratitude, joy, and awe are highlighted by positive psychology as contributing factors to personal wellbeing (Seligman, 2012). Positive emotions could therefore be the part of the process through which gardening develops wellbeing, and this link could be investigated further in Phase Two.

Spiritual wellbeing at times proved challenging to discuss directly with participants, due to its contested nature and the fact that the concept of spiritual has such a wide range of personal understandings. However, the literature appears to suggest that it is often linked to positive emotions such as joy, awe and hope. Positive emotions could therefore play a valuable role in supporting discussions around spiritual wellbeing, as experiences of these positive emotions could highlight instances of it that have not been directly or explicitly identified by participants. Phase Two also explores the role of positive emotions, but identifies and explores them as part of the interview process

through one focused question and also when expressed by participants in their discussion of their experiences.

4.6.3 Faith, Spiritual Wellbeing and Nature interaction

A key aspect of the Phase One results was the insight regarding how faith interacts with a sense of spiritual wellbeing whilst gardening. All participants felt that the fact that they followed a specific faith had little to no bearing on how they experienced spiritual wellbeing in their garden. Whilst this was explicitly expressed by some participants, a number of the comments made reference to their religious beliefs and were clearly faith informed experiences and perceptions of gardening. However, whilst some participants referred to the space in terms of their beliefs, those beliefs did not appear to make the participants more or less likely to experience spiritual wellbeing (as identified by them when in the garden or undertaking gardening activity).

The majority of participants focussed on the practical nature of gardening when considering many of the questions asked in the interview. This seemed to reflect the fact that for many participants gardening was a practical endeavor and one that they were not used to considering in a transcendental or spiritual way. The perception of gardening activity as providing spiritual benefit was not something consciously identified by participants. However when asked as a targeted question, gardening as a transcendent experience was made more explicit, in some cases to the participants' own surprise. Thus spiritual wellbeing benefits appear to be a subconscious byproduct of nature interaction activity, not necessarily a targeted aspect such as fresh air or increased physical fitness. Further investigation may help to better understand if spiritual wellbeing actually provides an 'x factor' element that many people are unable to identify or express when discussing the benefits of intentional nature interaction.

4.6.4 Community garden settings and spiritual wellbeing

The Phase One results suggest that being alone in the garden prevented distraction and allowed time for gardeners to fully immerse themselves in their environment. These instances of complete focus or flow (Csikszentmihalyi, 1996) allowed for deeper

contemplation of the gardening process. Many of the participants noted that whilst community gardening supported some aspects of spiritual wellbeing, they did not provide an environment entirely conducive to its development. Although being able to connect with others and contribute to a shared venture is considered conducive to spiritual wellbeing (Fisher, 2011; Westgate, 1996), the presence of others was thought by some to be distracting, and therefore detrimental to spiritual wellbeing. Whilst nature is perceived by some as offering a relatively peaceful environment, the addition of people to that environment can make it less so.

Being alone and having time to think were identified by participants as being as aspects of spiritual wellbeing experiences. Gardeners inferred that other people were often a distraction from the more quiet, contemplative time that they sought from the garden. These features, that are considered to be targeted experiences of gardening, are also often considered reflective of spiritual wellbeing. For example, other studies have found that 'settings characterised by silence, solitude and quiet were conducive to spiritual well-being' (Heintzman, 1999 p.23) whilst noisy settings and activities detract from spiritual wellbeing. These Phase One findings suggest that in terms of spiritual wellbeing, solitude is most beneficial when gardening as it allows for a closer relationship with nature. Gardening alone allows for focus to be centred on the human-nature relationship, with other people being considered a distraction to this.

In addition, community garden volunteers come from many walks of life and as such 'gardens convey tensions and conflicts present in wider society' (Bhatti & Church 2000, p.184). Interaction through a relationship with nature however (whilst also containing negative elements) offers less opportunity for conflict than those evident in some human relationships which could have a negative effect on wellbeing (Umberson & Montez, 2010).

Whilst community gardens are deemed beneficial for other dimensions of wellbeing such as social cohesion (Kingsley et al., 2009; Hartig et al., 2014) they may not support the thinking and reflection time thought beneficial to spiritual wellbeing. Despite this, some gardeners in the study reported that community gardening was supportive of

their spiritual wellbeing through developing a sense of connection to others and through contributing to a worthwhile endeavour. As a pro-social activity community gardening may build a sense of community relationship and highlight a sense of intrinsic shared values, both of which are often identified as a feature of spiritual wellbeing (Bensley, 1991; Westgate, 1996). Consequently it would appear that community gardening offers an alternative pathway to spiritual wellbeing through gardening activity and the human relationships involved therein. Whilst Phase Two moves on to collect data primarily from home gardeners and the human-nature relationship, the role of community gardeners in supporting spiritual wellbeing is revisited in the Chapter 6 of the thesis.

Participants who also gardened at home identified their personal garden as a highly valued space and a necessity in their lives. The home garden was identified as setting that was quiet and calm and provided a place of respite. Whilst mental respite is often seen as a benefit of nature interaction (Kaplan, 1992; Hartig, 2014), in this study nature interaction was also seen as providing an opportunity for relaxation through interest and joy in terms of the growing process. This highlights that mental respite may be achieved not only in instances of 'soft fascination' where effortless focus can be given to aspects of nature such as wind blowing through trees (Kaplan, 1992 p.139), but also in terms of 'process fascination' (Kaplan, 1995 p.172) and reflective of an interest in and deeper consideration of an experience.

The home garden was utilised as a multi-functional space able to fit with the life stage of the participants. This consideration of gardens as a personal space is reflected in the academic literature, with gardens in many ways being described as private spaces that are reflective of an individual's personality (Bhatti et al., 2009). Participants reported that community gardens were shared ventures and as such created an environment in which they were less able to be themselves and were a space that was less reflective of them personally. Consequently it would appear that community gardens are conducive to spiritual wellbeing predominantly in terms of a connection to other people as opposed to nature. As such, Phase Two of the data collection centered

primarily on home gardeners to focus fully on the one-to-one relationship developed between garden and gardener.

4.7 Overall reflection on the methods used in Phase One

As a reflective researcher following an iterative, inductive and pragmatic approach, consideration of the methods utilised so far forms a fundamental part of the study's development. This section reflects on the methods employed in the initial stages of data collection and some of the methods considered but not chosen. Reflections are drawn from participant comments and researcher memos taken both during and after data collection.

4.7.1 What has worked?

Individual interviews

One-to-one interviews have been an extremely valuable way of collecting data. By conducting the interviews in a personal and focussed manner, it has allowed for relationships to be established with the participants. This increased familiarity encouraged participants to speak much more freely about quite personal issues in a way that focus groups would not have allowed for. Individual interviews also attempted to mitigate issues around social desirability, which had been identified as a concern during the initial stages of the research whilst speaking to gatekeepers and gardeners of faith as a group. For example, in certain instances participants seemed reticent to discuss some issues in case they portrayed their faith in a negative light or made mistakes in their knowledge of scripture. This was less evident in the one-to-one interviews and was replaced instead by a much more personal reflection of gardening and its relationship to their faith.

Location and structure of interviews

Using community and home gardens as locations for the interviews was a useful research tool, as the gardens helped to contextualise the interviews. By conducting interviews in the garden it allowed individuals to refer to aspects of the space to express their thoughts. It also provided the opportunity to ask impromptu questions

based on features of the garden that perhaps they themselves had not acknowledged (e.g. garden ornaments or memorial features).

4.7.2 What has not worked?

Accessibility

Although community gardeners provide the primary source of data in Phase One of this study, restricted access to participants meant it was difficult to understand the personal experiences of those involved. In addition, the fact that some participants gardened in both home and community settings meant that findings did not come from a solely community gardening sample group. These difficulties, suggested a focus in Phase Two centered entirely on home gardeners who were more able to express their experiences outside of a collective approach.

Quantitative data collection

Collecting data regarding nature connectedness via the CNS was considered useful in the initial stages but it was not as effective as initially perceived. Procedural issues such as lack of time and clarity of statements alongside personal issues such as participants' feelings towards certain statements all highlighted the lack of suitability of the measure for this study. The CNS requires time and consideration to complete, however some participants rushed through the survey and opted for neutral or positive responses throughout even though some questions were reverse scored (4, 12 and 14). This highlighted either considerable inconsistencies in the participant responses or that they had not read and understood each individual question. In contrast some very focussed participants struggled as they felt that they needed more time to think about the questions, with one participant asking to complete the survey at a later time in order to give it her full attention.

A key issue in terms of using the CNS in this study appeared to be that the statements and the language used did not reflect their experiences and as such could not relate to it, *'well I wouldn't say it like that' (Participant 1)*. Participants expressed that some of the phraseology was not reflective of their experiences which was particularly expressed by the more practical and pragmatic participants. This does not mean that

these participants did not feel a connection with nature but perhaps that the holistic and subjective nature of gardening is difficult to take into account via a quantitative scale. For example many participants were conscious of their changing role in the garden as manipulator, controller, owner etc. and as such found it difficult to explain or describe that relationship through a collection of statements. For example, when asked about kinship with animals and plants, many felt they could not tick a positive response to this based on their feelings towards garden pests such as slugs. There were some concerns from participants that the statements were too excessive, reflecting a life philosophy as opposed to a connection with nature. Some participants felt that a connection with nature doesn't have to be a life philosophy, but can be made up of momentary events that build. Consequently some participants felt uncomfortable committing to a pre-determined sense of nature connection. As such it may be the case that participants in this study feel a less definitive and more emotional connection to nature as opposed to a cognitive one. The difficulty in measuring these two perspectives using the CNS has been identified as a potential criticism of the measure (Perrin & Benassi, 2009). Likert scale measures cannot be expected to always contain concepts that accurately reflect all participants' views. In terms of this study some participants felt that the nearest response was good enough to reflect the basic premise of how they felt and as such their responses offered some insight. However, the fact that some participants felt uncomfortable aligning their views with some of the phraseology raised doubts about its suitability in this study.

Whilst social desirability is not always an issue in environmental studies (Milfont, 2009), it was apparent that some participants in this study may have been completing the CNS based on a 21st century social expectation that people will feel an affinity with and want to protect the environment (Félonneau & Becker, 2008). In some cases participants gave answers that did not reflect the rest of the interview data they had given, which appears to have reflected an element of social desirability bias from the participants. This was addressed by asking participants to complete the forms out of view of the researcher, but despite this, many felt the need to talk the questions out, justifying and seeking validation for their responses. These experiences are reflective

of studies that have shown how surveys sometimes fail to accurately reflect individual feelings (Bertrand & Mullainathan, 2001), which suggests that it could be more effective to measure such experiences through participants' reported behaviours. In summary whilst the CNS proved a useful preliminary screening tool, the research aim and objectives are best answered through qualitative data as they seek to explore and examine the topic.

The positive emotions survey was also less useful in collecting effective data than was originally anticipated. This was due to a number of reasons primarily based around design issues. The survey asked participants to simply report which of the emotions they experienced on a regular basis; as such, the results gave a frequency which provided an overview of the emotions they experienced. However, the results produced provide no clear link between these emotions and their gardening experiences. The data collected via the interviews helped to address this issue somewhat as participants often used positive emotions to express both the outcomes and processes of their gardening experiences.

The qualitative data collected appeared to provide a greater level of personal detail and was much better suited to explore the research aim. Consequently it was decided not include quantitative measures such as the Connectedness to Nature Scale (CNS) (Mayer et al., 2004) or the frequency measure of positive emotions as a further part of the research.

4.7.3 Alternative data collection tools considered

Numerous data collection tools considered for inclusion early in the

Researcher reflection - Whilst the initial data helped to pilot question structures and data collection tools, it also helped with conceptual mapping. For example, some participant answers highlighted the assumptions made regarding gardeners and the concept of spiritual wellbeing. This allowed for a rethinking of the key concepts of gardening and spiritual wellbeing which led to more focussed data collection and analysis in Phase Two.

project were unable to be utilised. Although proposed as a data collection tool, diary entries from participants were dismissed due to a lack of participant interest and time constraints which limited the ability to organise the completion and collection of such data. This may be a more appropriate methodology for future data collection where time can be more adequately apportioned to the task.

Focus group sessions designed to bring together gardeners of different faiths to share skills and experiences were also explored but were unsuccessful due to a lack of interest from participants. Visual data were not collected as home gardens are perceived as primarily private spaces and as such photographs seemed inappropriate in these instances. It was also considered that the types of photographs taken would simply reflect researcher focus as opposed to providing an unbiased overview of the space.

Finally, social media was not utilised due to the fact that the data collection was not aimed at a wide range of people, but at a specific group. The social media sites already established by local groups were instead simply used to promote events. There was also no request from participants to have access to social media data collection tools or specific websites. This lack of technology in the data collection process allowed for greater inclusivity, as taking part in the research did not require any technological knowledge or an internet connection.

Respondent validation was sought from participants in Phase One to glean feedback and ensure that the data accurately reflected the participant comments. However, the response was low (two responses) and despite guidance on what respondent validation might include, most comments referred to practical concerns such as minor grammatical errors as opposed to content. Respondent validation adds to the amount of investment required from participants in the research and the feedback received in Phase One perhaps reflects a level of research fatigue (Clark, 2008) in participants. Consequently it was decided not to undertake respondent validation in Phase Two.

Demographic data were purposefully not explicitly collected during Phase One. This was due to the fact that participants were already completing the CNS and positive emotions survey as part of the interview and as such were at risk of research fatigue. To keep the data collection more concise but also more informal, a range of demographic questions were asked as part of the interview. These questions covered, age, gender, faith, employment status, size and type of garden, other gardening activity and location of garden. The data was primarily collected to assist with purposive sampling, but due to the limited number of participants was of little use. This approach was also deemed unsuccessful due to the fact that the data collection process didn't support participant confidentiality and therefore in Phase Two demographic data will be collected separately from the interview.

4.8 Implications for Phase Two

Phase One collected qualitative and quantitative data with nine community and home gardeners of faith. The findings suggest that a human-nature relationship is developed through gardening and that the experiences and emotions encountered through this relationship may be supportive of some aspects of spiritual wellbeing. Community gardening appears to support some aspects of spiritual wellbeing such as connection to others and a sense of contribution through the relationship developed with other people. These findings reflect some aspects of the possible links between spiritual wellbeing and gardening, but only marginally address the interaction with nature aspect of the research aim. Phase Two therefore sought to address this by focusing primarily on home gardeners and specifically exploring the human-nature partnership.

Methodologically, the data collected identified that purposive sampling of gardeners of faith is unnecessary and that irrespective of faith, gardeners could offer valuable insights into the development of spiritual wellbeing. The quantitative data, were not considered to be of sufficient quality or volume to offer meaningful findings. Consequently, Phase One identified a number of issues to be addressed and provided several useful lessons that helped shape the design and focus of Phase Two. Based on

findings from and reflection on the data collection processes in Phase One, below is a list of both the areas of inquiry and methodological aspects that are to be addressed in Phase Two.

Areas of inquiry to be addressed in Phase Two:

- Ask specifically about spiritual wellbeing and let the participants self-define.
- Ask about negative and positive experiences and emotions to further investigate the feedback component of gardening and wellbeing and provide a rounded perspective.
- Ask home gardeners about gardening with others and alone, to explore the importance of the one-to-one relationship with nature in gardening.

Methodological aspects to be addressed in Phase Two:

- Collect solely qualitative data as it explores the personal experience and meaning behind actions and experiences and therefore is better suited to addressing the research aim.
- Use home gardeners as sample; they may offer a clearer picture and experience of the human-nature relationship.
- Gardeners of faith are not necessary for the sample; any gardeners could participate.

4.9 Chapter Summary

The research aim seeks to *Explore how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners*. The findings and discussion outlined above identify that some of the experiences of community gardeners could indeed enhance/develop spiritual wellbeing through the development of human-human relationships. The findings also suggest that some gardening settings also allow for the development of a human-nature relationship. This is supported by participants' comments which suggest that individual gardening provides the quiet and solitude that offers them an opportunity to develop a relationship with nature. As such Phase Two

will focus on these settings as an opportunity to explore the human-nature relationship and its benefits to spiritual wellbeing further.

Chapter 5: Home gardeners' understanding and experiences of spiritual wellbeing - Phase Two

This chapter begins by offering an overview of phase two and then moves on to briefly discuss the methods employed and the data analysis process. The majority of the chapter focuses on providing a detailed overview and discussion of the findings.

5.1 Phase Two Overview

The overall research aim, to explore how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners, was also addressed in the second phase through objectives 3 and 4.

Table 5.1: Phase two objectives and chosen methods

Phase Two Objectives	Methods
3. Explore gardeners' understanding and experiences of spiritual wellbeing.	Semi-structured interviews with home gardeners.
4. Establish whether the features that reflect spiritual wellbeing (as defined by participants and evident in the literature) are present in or developed through gardening.	Semi-structured interviews with home gardeners. Data analysed via thematic analysis to identify links between gardening activity and participants' experiences of spiritual wellbeing.

Phase Two addresses the research aim by conducting purely qualitative data collection with home gardeners. These participants and settings were chosen for methodological and theoretical reasons beneficial to the progression of the study as outlined in Table 5.2.

Table 5.2: An overview of and rationale for the approaches taken in Phase Two

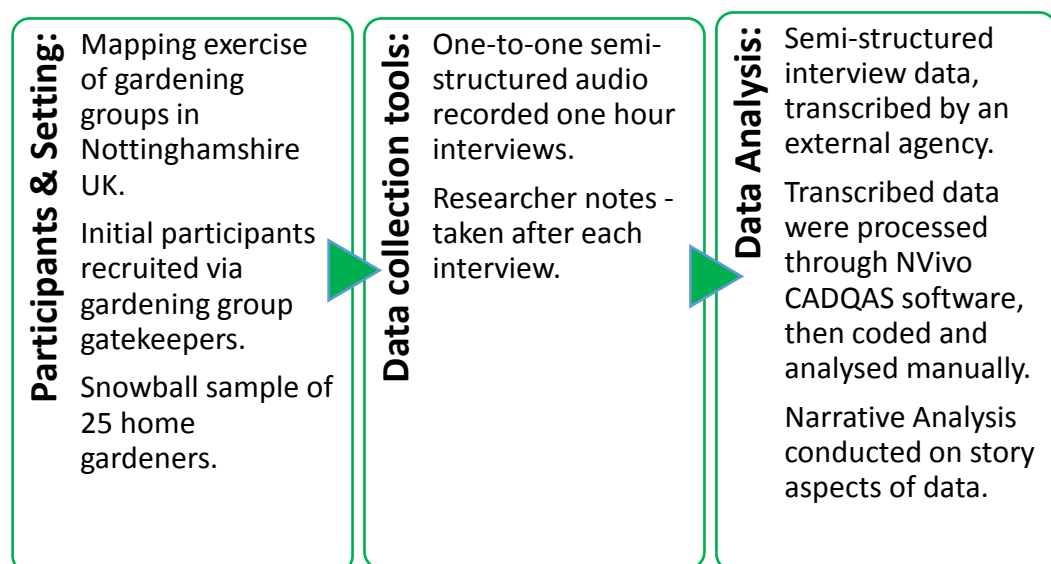
Aspect of study	Approach	Rationale
Method	Qualitative data collection.	A purely qualitative approach was taken to understand the personal experience, meanings and perspectives of the participants.

Sample	Home gardeners	Home gardeners were chosen to gain an understanding of the spiritual wellbeing experiences of home gardeners and to explore whether spiritual wellbeing is experienced differently in home garden settings.
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Phase Two utilised qualitative data collection with home gardeners who did not necessarily follow a specific faith. Figure 5.1 provides an overview of Phase Two in terms of the participant sample chosen, tools used for data collection and analyses undertaken. This research overview offers a detailed outline of the stages highlighted in Figure 5.1 alongside further consideration and discussion of the approaches taken.

Figure 5.1: Phase Two overview

Research Aim: Explore how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners.



5.2 Methods

5.2.1 Participants and setting

A mapping exercise took place of gardening groups across Nottinghamshire to identify individual gardeners to take part in research. This exercise involved identifying social groups consisting of primarily independent gardeners that had access to a personal garden. This mapping exercise was completed via internet searches, local area

directories and community groups. Four groups in total were identified and meetings took place with gatekeepers from each of the groups which led to further involvement in meetings and social events which enabled initial participants to be identified.

In total 25 participants were recruited via purposive snowball sampling. The use of a purposive snowball sampling approach (Robson, 2011) was thought useful as it selects participants based on the research aim seeking 'information rich' participants or those that can help cast more light on the central concern of the research (Patton, 1990 p.182). A respondent typology was identified that consisted of independent home-based gardeners who expressed an interest in talking about their gardening experiences. This typology was developed to ensure that the participants were gardeners with a personal garden and therefore may have some experience of gardening to draw upon. It is important to note that as in Phase One, some of the home gardeners also took part in community gardens (5/25) and as such their experiences reflect these settings. Some older gardeners seemed particularly reticent to talk about their experiences and therefore gardeners open to expressing their experiences were also purposely selected. A demographic range of home gardeners open to taking part in the research were then contacted utilising the social connections already established between individuals and groups.

Potential participants were approached in a variety of ways including by email, in person and over the telephone. The research was described as a study looking at the "non-physical or hidden benefits of gardening" and that taking part would consist of a one hour audio recorded interview that could be undertaken at a time and place of their choice. All those who agreed to take part were interviewed face to face and all participants were given a gardening voucher after the interview had taken place to compensate them for their time.

As the study progressed, the selection of participants became more tailored. This enabled the demographic range to be widened and contrasting cases to be identified to ensure representation from poorly-sampled groups. Male participants were particularly targeted as they were considered under represented; this was not due to

the fact that they did not participate in gardening activity, but rather that they did not attend many gardening groups or respond to calls for study participants. Consequently male gardeners were often sourced through female contacts. Gender and age were the main categories by which participants were selected. A gender balance was important to ensure a wide overview of perspectives as the literature indicates that men and women may have different motivations for gardening (Kidd & Brascamp, 2002; Parry et al., 2005). A range of age was also considered important to reflect the development and role of gardening over time and to access a wide range of current and past experiences. In total, data were collected with 25 participants.

5.2.2 Data Collection Tools

Overview of Interviews

Data were collected with 25 participants through one-to-one semi-structured interviews. The interview involved participants answering 18 questions based around a semi-structured open-ended interview schedule (Appendix E).

The development of the interview schedule was based upon insights from the literature and was styled around the underlying principles of a phenomenological approach, seeking to understand the participant experiences. The schedule was influenced by some concepts from the field of positive psychology such as the role of positive emotions (Fredrickson 2013). For example, some questions were designed to explore occurrences of positive emotions and the way in which they may help to develop spiritual wellbeing experiences. Some provocative phrases were also included to

Researcher reflection – At times I found it difficult to manage participants' expectations of the interview. Many came prepared to talk in detail about the practical aspects of gardening and much of the interview time was spent wrestling back around to the study topic. Over time I found it easier to give participants some indication of what was to come and to prepare them to begin thinking about their gardening experience in different ways. I have come to realise that preparation is an important step in the research process not only for the researcher but also the participant.

generate responses such as the use of respondent quotes. This approach helped to reduce the question/answer manner of the interview and develop a more conversational tone which was conducive to allowing richer responses. The ordering of the questions in the schedule was also considered thoroughly to help participants relax and open up as the interview developed. This was done by placing the more personal and the conceptually difficult questions later in the interview. Consequently these were then addressed once a rapport had been developed and the participant felt comfortable in clarifying questions or discussing difficult issues. The questions were also developed through a close examination of the developing literature and through the findings from Phase One as discussed in detail below. A combination of these elements helped to shape and develop the interview questions.

All the interviews were conducted face-to-face and lasted approximately one hour, ranging from 38-70 minutes. At the end of the interview, participants were asked to self-complete a demographic fixed response questionnaire including age, gender, identified faith/religion, number of years gardening, community or home gardener and type of gardening undertaken, i.e. vegetable or flowers etc. (Appendix F).

The majority of the interview schedule focused around approximately 18 open-ended questions. The interview schedule was piloted with two individuals' prior use and modified to increase clarification and conciseness in order to make the best use of the interview time. Due to the semi-structured format of the interview, the schedule offered guidance only with questions

Researcher reflection: The participants taught me a great deal about the development of interview questions. I realised that some issues did not need to be asked directly and were actually less fruitful when tackled in this way. As my skills developed, I felt confident in letting the conversation develop more organically. For example, when asking about illness and injury participants often passed over it quickly. Reflections on the interview scripts showed such issues were still discussed by participants, but more organically as they reflected on their experiences.

often being adapted, rephrased or reordered in light of the progress of the interview.

5.2.3 Development of Interview Questions

In comparison to the interview schedule used in Phase One, questions were developed to be more 'user friendly'. This restructure involved asking fewer obscure in-depth questions and replacing these with a phrase or quote from another gardener that participants were asked to reflect upon. All of the quotes used were influenced by or directly taken from Phase One participant transcripts and they had often given these quotes in response to overly verbose or poorly worded questions in the interview schedule.

Incorporating the quotes into the Phase Two data collection was beneficial as it utilised language used by previous participants which was often more accessible. This approach also suggested that others had said such things before, encouraging participants to also think about gardening in a different light. The quotes were printed on laminated card and handed to participants so that they could view them whilst considering their answers.

The Phase One interview schedule also utilised a number of activity-related questions; as such many of the responses were very process oriented, with much of the data focusing on the details of the growing process. Phase Two instead focused on the lived experience (Van Manen, 2015) of gardening and asked participants to reflect on emotions and experiences. These questions were often more difficult for participants to answer, but enabled the data to scratch the surface of gardening as an activity. This encouraged participants to move away from the practicalities of gardening to look more deeply into the role it played in their lives and the meaning it held.

In terms of spiritual wellbeing, a direct approach was taken with participants being asked to personally define spiritual wellbeing. In addition to this, the review of the literature helped to provide an overview of how spiritual wellbeing was currently defined and some of its common features which were used to help shape some of the interview questions. The features and definitions highlighted by the literature also

helped to identify instances where spiritual wellbeing seemed apparent but was not expressed directly as such. This was undertaken in hope of addressing a common issue within research into spiritual experiences and spiritual wellbeing in which, 'people may have spiritual experiences and not interpret them as such' (McDonald & Schreyer, 1991 p.181).

Table 5.3 gives an outline of the questions asked and offers a justification for their inclusion in the interview schedule. The questions also make use of a number of prompts, utilised to encourage participants to think more widely or alternatively to focus their answer.

Table 5.3: Interview schedule, with justifications and researcher reflections.

Final Question	Justification for inclusion	Researcher Reflections, including Insights and Adaptations.
<p>1. When did you first start gardening and why?</p> <p><i>Possible Prompts:</i></p> <p><i>What would say is your favourite activity? Why?</i></p> <p><i>What is your favourite season? Why?</i></p>	<p>To identify whether it is a new or continuing activity for them.</p> <p>Prompts help to identify specific features of gardening such as frequently reported activities such as, 'e.g. 'digging in the soil' and what might these activities reflect/indicate?</p> <p>By asking about the seasons/cycle of the garden it may help to identify what is most important; the actual activity of gardening or the engagement with nature? (first phase participants most liked seasons in the garden when it felt 'under control')</p>	<p><i>This was originally going to be asked as a 'Grand tour' question (Fox et al 2010) i.e. 'tell me about your garden'. However it was decided that this approach may have led to some quite lengthy responses regarding the practical details of soil types and growing conditions etc. After consideration the Grand Tour question was rejected particularly due to the fact that during the piloting process, the most common response was found to be 'well what do you want to know?'</i></p>
<p>2. Would you consider gardening to be a job to be done or a labour of love?</p> <p><i>Possible Prompt: Can you give me an example of your experience of this?</i></p>	<p>This may help understand how participants balance the task-oriented side of gardening with the contemplative side and how they perceive gardening. It may also elicit responses regarding sense of care and responsibility for garden.</p>	<p><i>In piloting participants replied 'a bit of both' which suggested that the data may be useful in acknowledging the dual nature of gardening.</i></p>
<p>3. Do you prefer gardening alone or with others?</p> <p><i>Possible Prompt: Why is this?</i></p>	<p>This question replaces a question regarding gardening as a social activity that was utilised in Phase One.</p>	<p><i>After a few initial interviews it became apparent that the question needed to be expressive about who such 'others' could be. Participants did not identify family members as others.</i></p>
<p>4. To what extent does gardening provide an escape from the stresses of everyday life for you?</p>	<p>'Being away' and 'escape' (Fredrickson & Anderson 1999) are important features in wilderness-based spiritual wellbeing and so it may be interesting to explore whether this is based on location or a state of mind. It may be that a small garden in a city also provides a sense of escape. This is seen to be the case in some instances in which nearby nature also offers a sense of 'being away', which is considered to be a dimension of restorative environments (Kaplan & Kaplan, 1990).</p>	<p><i>Stress was difficult to ask about as some participants stated that they are never stressed. As such the question was rephrased to focus on just an escape from everyday life.</i></p>

5. Considering this quote from another gardener... 'Gardening connects me to something larger than myself' to what extent is this reflective of your experiences?	Connection is a highlighted feature of spiritual wellbeing and one occasionally highlighted by first phase participants. However it may not be consciously identified by gardeners so using a quote helps to prompt the discussion.	<i>This question created some confusion in that participants interpreted 'something larger than myself' in different ways. Some understood it to mean a religious god and felt they couldn't relate to that, very few thought about nature and a connection to that. Many referred to having a connection to nature throughout the interview but when being asked explicitly about connections they did not identify it.</i>
6. When you are gardening do you feel that you are working with or against nature? <i>Possible prompt: Why is this?</i>	This is a Phase One question utilised in Phase Two. It is designed to identify whether gardening is considered to be a nature partnership activity by participants.	<i>Early responses to this were 'sometimes with sometimes against'. Question was adapted slightly to glean a more detailed response initially without having to follow it with lots of prompts. Question eventually asked 'do you feel you work with nature in the garden' this selected just one option to agree or disagree with, rather than trying to fit both options into the question which in turn allowed for a neutral response.</i>
7. Compared to other outdoor activities what is special about gardening for you?	This is an adaptation of a Phase One question. By including the comparison element it is hoped that participant will really think about the specific aspects of gardening and not just being outdoors.	<i>This was a useful question and remained as written as it raised lots of thought provoking discussion about garden settings compared with other spaces.</i>
8. Some people liken caring for a garden to caring for a pet, in terms of watering, tending etc. <i>Possible prompts: To what extent do you agree or disagree with this? Can you give an example?</i>	This is based on a quote from a Phase One gardener and may help to prompt thinking about the garden in terms of care and responsibility.	<i>This was a useful question but on reflection should have been adapted to 'do you consider your garden to be a responsibility? As many people got caught up in the pet analogy, e.g. I am allergic to dogs so I wouldn't know'. This taught me to be careful in future research of analogies as not everyone can relate to them.</i>
9. What role has gardening played during negative experiences/times in your life such as illness or	This question is a direct result of the first phase data collection. The answer to this may help to identify whether gardeners are experiencing spiritual wellbeing (which is often seen as	<i>This question focused on negative as opposed to stressful events, as many participants could not relate to the term 'stressful'. The question is trying</i>

injury?	supportive in difficult times) or something else.	<i>to understand the role the garden played when they were unable to tend it and this was clarified during the interview.</i>
10. What do you think about whilst gardening? <i>Possible Prompt: Do you ever lose track of time?</i>	This may help to identify whether participants are thinking about the process of gardening or something else. It may help to identify to what extent gardening provides time for contemplation of other issues and concerns.	<i>The prompt for losing track of time was included after piloting, as participants often talked about their thinking processes in tandem with how much time they felt they had to be able to think.</i>
11. Considering the following quote from another gardener...‘I hate to feel rushed when gardening, I like to soak it all up and allow my mind to wander’, to what extent do you feel this way? <i>Possible prompt: Which gardening activities support this feeling for you?</i>	This is in support of question 10. By using a quote it is hoped that participants will consider the role contemplation may play in their gardening activity. The use of a quote in this question may help to identify subconscious features of gardening activity that are not immediately identified by participants. This question was asked to explore if specific activities allowed for contemplation and if those activities were enjoyed by participants.	<i>Participants found this difficult to answer. As such this question over time morphed into the one above, as consequently participants had often already answered Q11 as part of Q10.</i>
12. Do you ever experience positive emotions whilst gardening such as hope, gratitude or joy?	This was asked as a general question rather than as a list as had been used in Phase One. Asking about positive emotions in this way seeks more detail about such experiences, and explores the circumstances in which they felt those emotions.	<i>This worked less well than anticipated as participants had too short a time to really think about their experiences, they instead simply said ‘oh yes I definitely experience those’ then they talked about general instances in which they enjoyed gardening and often did not link it to specific emotions.</i>
13. To what extent do you feel gardening reflects your personal values or strengths? <i>Possible prompts: Can you give me any examples? For example generosity or patience.</i>	Intrinsic values and strengths are an aspect of positive psychology. Some values and strengths are thought to be particularly linked to transcendence (a feature of spiritual wellbeing) through ‘connections to the larger universe and sense of meaning’ (Peterson & Seligman 2004 p.36). This question was designed to find out if gardening supports and develops these values and strengths.	<i>This was a difficult question, it was eventually supported with prompts as participants were struggling to understand the question. This was considered to be undertaken as another tick list survey but this time including values and strengths, but previous use of tick list survey had not worked so well.</i>
14. How do you think you would feel if you didn’t	This question was initially asked to encourage participants to talk about the importance of gardening in their	<i>This question proved very useful in terms of the discussions it triggered. Many participants</i>

have access to a garden?	lives. The personal importance of the garden was often dismissed when discussed in terms of meaning and purpose and so by imagining not having a garden it was hoped that indirectly participants would be able to explore the importance of the garden.	<i>talked about gardening as a 'need' as opposed to a 'want' and as such this question became more focused around this division. The question also raised feelings around gratitude and when envisaging not having a garden participants began to express their gratitude at having one.</i>
15. Considering the following quote, 'Gardening helps me find purpose in my life', to what extent do you feel this way? <i>Possible Prompt: Is there any other word in your life that you would replace 'gardening' with in this sentence?</i>	This question was asked to expressly address the notion of meaning and purpose as an important aspect of spiritual wellbeing.	<i>The prompt regarding 'what would you replace gardening with' was added after piloting as some participants stated 'no gardening doesn't give me purpose but ... does'. There began to be commonalities in the things that gave them purpose and so it was deemed useful to also ask more about what does give them purpose beyond or instead of gardening.</i>
16. Part of this project is based on understanding the role of spiritual wellbeing in gardening. There are lots of different views about what constitutes spiritual wellbeing. How would you describe spiritual wellbeing?	Data collected here may contribute to the development of a definition of spiritual wellbeing.	<i>Initially the question asked 'Could you please give a brief description of the term 'spiritual wellbeing' as you would understand it? But the formality saw pilot participants freezing up, so it was adapted. This question was also bookended with comments such as there are no right or wrong answers, I'm just interested in your understanding etc.</i>
16a. Now with your description in mind please state the ways in which you feel your garden/gardening develops or detracts from your spiritual wellbeing.	May help to identify what participants report and if they can consciously relate anything about gardening to their definition of spiritual wellbeing.	<i>Coming at the end of the interview participants were tired and often just stated 'well all the things I've said before really'. It was hoped that this would be an opportunity to create a take home message from each interview, but that rarely happened. This helped me to become aware of research fatigue in participants.</i>
17. In summary, how would you describe the benefits of gardening to someone who has never done any gardening	This was to provide the opportunity to pull out anything they think is really good or beneficial about gardening that they may not have identified before. It may be easier to identify the	<i>This question was sometimes useful, but once again as with the pet analogy some participants got too caught up in who they might be promoting it</i>

before?	benefits to others than to see how it is beneficial for yourself.	<i>too and worried about not all people liking gardening etc.</i>
18. Is there anything else you would like to tell me about your gardening experiences?	To cover anything that may have missed. This question may also help to develop the interview schedule over time to include additional/missed topics.	<i>Participants used this as an opportunity to tell me things they had thought about prior to the interview, i.e. poems and films that reflected their feelings or other organisations that I may be interested in.</i>

As the data collection progressed, the schedule itself was also adapted with some issues raised so repeatedly by participants that they became permanent additions to the schedule. Whilst such additions gave a level of inconsistency to the data collection, they did allow for the study to develop taking into account the individual participants' experiences and evolving findings. Table 5.4 lists the questions that were formally added to the interview script and the justification for these additions based on the evolving data collection.

Table 5.4: Questions added to Phase Two interview schedule

Additional question	Justification for inclusion
Is gardening a creative outlet for you?	Many early participants raised this aspect of gardening, as such it was included as it was deemed something that may be important to all gardeners and the expression of it could not be left to chance. Therefore if it was an aspect for the participant it was highlighted rather than overlooked.
What is your role in the garden? What are you to it?	This became a very important question as it was the first question that actually looked at what the gardener offered the garden. This question instigated some expressive responses from participants in relation to the human-nature partnership, in which they used some very emotive language.
Do you wear gloves whilst gardening?	This was added as a question in some interviews as participants were very expressive about needing to feel the garden. This was then included as a question and highlighted how the garden engaged a range of senses.
Do you talk to your plants?	This was added after some participants referred to their plants in an almost human-like fashion, often expressing great empathy and care for them. This question helped to begin a deeper conversation about the human-nature relationship in the garden.
Have you ever had a moment beyond the material or a transcendent moment in the garden?	This question was asked only on occasions when participants seemed particularly open to discussing such experiences. This was used with great caution as in some instances participants would shut down or laugh it off, clearly feeling uncomfortable with the direction of the questioning.
Do you consider yourself to be a frugal person?	This was asked as money, savings and costs were often raised by participants in terms of gardening alongside issues of materialism. As such it was deemed appropriate to ask if they saw themselves as a frugal person as this was seen to be a more socially acceptable question than do you consider yourself a materialistic person.

5.2.4 Data to support interview transcripts

Demographic self-completion questionnaire

Participants were asked at the end of the interview to complete a demographic form (Appendix F) to provide context for the interview data. The demographics schedule asked participants to state their age, gender and how long they had been gardening. These were left as open-ended questions in the first instance and then categorised as appropriate. In addition participants were asked if they considered themselves to be a specific type of gardener: independent/allotment/community or other. This was asked

to identify if there was any connection between gardeners who experience spiritual wellbeing and the types of gardening they undertook. Participants were asked what they mostly grew in terms of veg/fruit/flowers/herbs/other. This was also carried out in order to understand any connection between gardeners who experience spiritual wellbeing and the types of gardening they undertook. Finally, participants were asked whether they considered themselves to be a religious/spiritual/other person, in order to take into account whether previous experiences or affiliations with spirituality or religion may have had an effect on their responses.

The demographic form purposefully asked about religion as opposed to faith (as in Phase One), this was to make the distinction between a doctrine-based religion and spirituality. The literature identifies that religion and spirituality are very different things (Casey, 2013) and as such an affiliation to either group may reflect different perceptions of nature in their gardening experiences. The overall demographic data were also used in helping to select scripts for the story coding section of the analysis in line with a maximum variation sampling approach, which allows for the greatest level of respondent diversity to be drawn from the sample (Patton, 2001).

5.2.4 Researcher Notes

Throughout and at the end of each interview, researcher notes were also written which included anything additional that had not been recorded such as body language or the environment in which the interview took place such as the garden. These notes were beneficial in assisting with reflections on each interview and helped to recall the scene and the responses of each participant. Much is said and expressed in a face-to-face interview situation beyond that of language; 'non-verbal data' such as body language and facial expressions also offer a valuable source of information (Ritchie et al., 2013 p.229). The additional researcher notes helped to document those additional features of each interview. The notes also provided a quick summary of the interview and recorded key themes as they began to arise.

5.3 Data Analysis

The data were analysed through a range of processes to suit the types of data collected. This section outlines the analysis processes used, including descriptive statistics, thematic and narrative analysis. Analysis of the qualitative interview data in this study involved numerous stages and, as such, each stage of the analysis is numbered to assist with clarity.

5.3.1 Demographic data analysis

Demographic data were analysed using frequency counts and descriptive statistics. In addition a matrix analysis of the religion/spiritual aspect of the demographic data that had been collated from participants and their answers to the spiritual wellbeing question was conducted. The interview question that asks participants to define spiritual wellbeing reflected some answers specific to the participants' faith. The coding of such answers were part of, but also very different to much of the data collected and as such were categorised separately. This data were used in support of a matrix analysis of the faith demographic data and the overall answers to the spiritual wellbeing question. This was undertaken to give insight into any differences between participants who identify themselves as religious or spiritual and their understanding and perception of spiritual wellbeing. The data helped to identify the role that religion and faith may play in spiritual wellbeing in relation to gardening.

5.3.2 Qualitative Analysis Overview

All of the interviews were audio recorded and (due to time constraints) transcribed by an external agency.

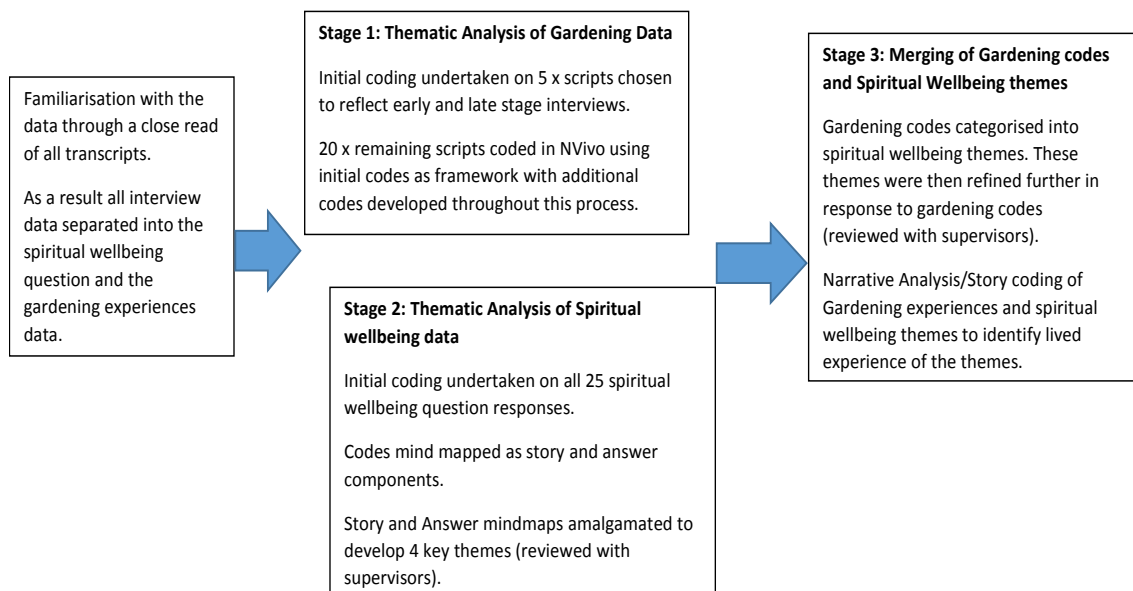
As in Phase One the qualitative data was analysed using Braun & Clarke's six stages of Thematic Analysis. Prior to analysis of the interview data, a preliminary read through of all the scripts alongside any observational notes taken during those interviews was undertaken. This review process allowed for a familiarisation with the data and also identified a need for the spiritual wellbeing question data to be separated out, as the responses to this question were singularly focused and referred solely to spiritual wellbeing. Consequently these data were separated out and analysed separately from

the questions regarding gardening experiences. The data were then analysed in three basic stages as outlined below;

1. The interview data focused on the gardening experience questions were coded to begin to consolidate the data.
2. The spiritual wellbeing question data were then divided into both answer and story responses and coded; this created four key themes.
3. The gardening codes created in stage one were then mapped against the four spiritual wellbeing themes developed in stage two. As this stage pulls together findings from data analysis it is only outlined briefly here, but then discussed fully as part of the key findings and discussion section 5.4.

Details of these stages are outlined in sections 5.3.3 to 5.3.5 below and to aid clarity, are used to structure the analysis and findings sections of this chapter. Figure 5.2 provides a schematic outline of the process used for analysis of the interview data.

Figure 5.2: Phase Two Data analysis process



5.3.3 Stage one – The gardening experience data

Analysis of the data collected in response to the 18 questions (excluding the spiritual wellbeing question) relating to participants' gardening experiences were initially coded and entered into the NVivo Computer Aided Qualitative Data Analysis

Software (CAQDAS). As previously outlined, Thematic analysis was chosen as the most appropriate form of analysis for the gardening data as it allows for initial codes to be identified and for a comprehensive overview of the data and similar themes across the scripts to be identified (Braun & Clarke, 2006). This analysis sought not to fit the data into a pre-formed framework or theory, but to use the data to develop an understanding of the personal *and* shared experience.

The steps below describe how the coding process was undertaken:

* Paper copies of all interview transcripts were read through, along with the researcher notes taken after each interview. This allowed for an overview of the dataset as a whole and the identification of preliminary themes.

* 93 initial codes were then developed based on a close read of a sample of 5 scripts that were chosen to reflect both early and later stage interviews. These codes often consisted of just one word or a phrase that began to summarise a cluster of quotes.

* The initial codes were put into a coding framework which included a definition of each code and quotes that reflected that code (examples of which can be seen in Table 5.5). The definitions given for each code were created, combining the word as used by participants with a dictionary definition, thus taking into account the actual definition of the word and participants' interpretation of it. Codes that were difficult to define were reviewed with the three thesis supervisors to ensure validity and improve robustness.

*Researcher reflection -
Dictionary definitions added to the interpretation of the data.
For example; 'Materialism' is defined as 'A tendency to consider material possessions and physical comfort as more important than spiritual values' (Oxford English Dictionary).
Whilst many participants expressed an anti-materialistic sentiment in their comments they had not specifically related it to 'spiritual values'.
This reflected the way in which the notion of the spiritual may be present but sub-consciously experienced.*

* Once the initial coding framework was established and the definitions honed, it was applied to the rest of the data using NVivo, and any data fitting into a code was categorised as such. Data not fitting into a code was categorised as an 'outlier'.

5.3.4 Analysis stage two - The spiritual wellbeing question data

The spiritual wellbeing data relates solely to the question on the interview schedule which asks participants 'How would you describe spiritual wellbeing?'. Whilst much of the interview schedule was designed to explore features of spiritual wellbeing in everyday gardening activity, this one question directly addresses the concept of spiritual wellbeing. Consequently this was analysed separately to the other data.

Thematic Analysis was utilised here and once again the initial coding process began by taking a preliminary close read of all the participants' answers to the spiritual wellbeing question. This process highlighted that there appeared to be two main features present in each answer; participants often gave an *answer* to the question and a *story*. The answer to the question was usually given first and quickly; it appeared to be a gut reaction and was often reiterated at the end of their discussion to solidify their response. Many participants also told a story when reflecting on the question which did not necessarily reflect their initial answer to the question. When a story or analogy was given it often appeared more consistent with the participants overall responses than their initial answer. The story element seemed to reflect personal feelings and experiences of spiritual wellbeing. Consequently the answer and story responses were identified and coded separately.

The themes developed from this analysis process helped to begin to build a picture of spiritual wellbeing as understood by the participants. Mind maps were created using the XMind tool to illustrate the themes expressed through the story and answer responses that were given to the spiritual wellbeing question (see Figures 5.4 and 5.5).

The spiritual wellbeing question also offered another opportunity for analysis with regard to the participants' difficulty in answering the question. Comments were made by participants in the transcripts about the spiritual wellbeing question in relation to

this difficulty, and were coded separately as 'Difficulty answering/ expressing'. This data helped to develop a discussion regarding the difficulties in establishing a definition of spiritual wellbeing.

5.3.5 Analysis stage three – Merging codes and themes

This next stage of the analysis sought to consider both the gardening codes and the spiritual wellbeing themes in tandem. This process allowed for the refinement of themes as per the thematic analysis process (Braun & Clarke, 2006). In order to explore links between the codes and themes, all 93 gardening codes were entered into an Excel spreadsheet and categorised as to whether the code was thought to be reflective of spiritual wellbeing (Yes, Less reflective or Unsure). This categorisation was informed by a combination of researcher interpretation, participants' expressions of spiritual wellbeing as present in the interview data and insight from the literature review. This process was undertaken as not all of the codes were directly linked to spiritual wellbeing. For example the 'unsure' and 'less reflective' categories illustrated the fact that the gardening codes were not originally defined with spiritual wellbeing themes in mind. As such some of the codes in these categories refer to specific gardening-specific practices and did not include the depth of experiences expressed in the other codes.

The spiritual wellbeing themes were then mapped against the codes and it became apparent that the majority of the codes reflected the spiritual wellbeing themes. Thus the initial codes developed from the gardening data helped to develop the spiritual wellbeing themes. As such the data drew the themes inductively rather than deductively with the themes coming from the spiritual wellbeing data and being then applied to the gardening data. This process also led to the refinement of the 93 codes, with participant quotes within each of the gardening codes being reviewed for content and similarity.

5.3.6 Further Analysis

There were two further analysis opportunities in the data which included building meta-themes and story coding. Building the meta-themes involved considering the

links between the gardening codes and the spiritual wellbeing themes in more detail and examining the ways in which the themes interrelated. The steps below summarise the methods used in building the meta-themes, which is described in full as part of the discussion chapter (section 5.5). It became apparent through the stage three analysis that many of the codes reflected multiple spiritual wellbeing themes. As such further analysis was undertaken which involved explicitly allocating the themes to each code (Appendix G). This process enabled a picture to begin to be built up identifying which gardening experiences appeared most closely linked to spiritual wellbeing (based on the number of themes they were linked to) and which were not. This analysis process gave further insight in relation to the links between the codes and the themes and as such allowed for further development of the themes.

Story Coding

Throughout the interviews, participants had recounted a wide range of stories beyond those given in response to the spiritual wellbeing question. Many participants had told stories throughout the entire interview that had reflected their gardening experiences and some of the spiritual wellbeing themes. Whilst the process of initial coding drew themes from these stories, it failed to acknowledge the interrelated nature of the themes as highlighted in the stories. In order to address this, it was decided that a closer narrative analysis would be conducted on a small sample of scripts to provide a holistic view of these participants' experiences.

Research reflection – This level of story coding was not undertaken on the stories told in relation to the spiritual wellbeing question. This is partially because those stories were shorter and more focused, but also because it was in looking over the stories told in relation to the spiritual wellbeing question that had highlighted the power and importance of the stories told by participants. This encouraged me to go back through the interview transcripts and pay closer attention to the role of stories in participants' responses.

Story coding is a form of narrative analysis that involves breaking down stories recounted by participants into their constituent parts to better understand the key themes being expressed and the purpose behind the telling of the story (Hines et al 2014). Story coding is particularly useful in this case as it offers lived experience examples of the gardening codes and spiritual wellbeing themes interrelating. As such, story coding was undertaken on six scripts chosen through a process of maximum variation sampling (Patton, 2005). The story coding framework utilised in this study and the findings are outlined in more detail under section 5.5.4.

5.4 Key findings from Stages 1 to 3

To aid clarity, this section is structured to mirror the stages of data analysis: demographic data (5.4.1); stages one to three (5.4.2 to 5.4.4). Results from further analysis offer a deeper understanding of the relationship between spiritual wellbeing and gardening, are reported in 5.5. This section also offers some discussion of the literature in relation to the study findings.

5.4.1 Demographic data

Twenty-five individuals in total participated in the research. Each individual had access to a garden at home where they grew a mixture of vegetables and/or flowers. In terms of location the majority gardened from home with a small percentage (24%) also contributing to a community garden space. The majority of the participants were female (72%) and the average age was 52 (range 25-76 years). All participants had been gardening for more than one year with some gardening for many years (range 2-66 years). This would suggest that some of these individuals began gardening at a young age and that gardening has been a long term interest, highlighting that gardening can be a sustainable, consistent nature-interaction activity which some individuals invest many years of their leisure time in.

Table 5.5 Phase Two Respondent Demographics

Table Key: Q4: 1=Community gardener, 2= Allotment gardener, 3= Home gardener, 4= Other type of gardener, 5= Prefer not to say. Q5: 1= Vegetables, 2=Fruit, 3=Flowers, 4= Herbs, 5= Other, 6=Prefer not to say.Q6: 1= Religious, 2= Spiritual, 3= Other, 4=Prefer not to say, 5=Could not answer, 6= Left Blank.

No.	Age	Gender	Years gardening	Q4. Type of gardener	Q5. Mostly grow	Q6. Religious/Sp 'I consider myself to be...'
1	69	F	40	1,2,3	1,2,3,4	4
2	64	F	-	3	2,3	2
3	61	F	36	3	3,4	1,2
4	44	M	10-12	3	1,2	6
5	41	F	36	2,3	1,2,3,4,5	1,3 (Eco – Conscious)
6	28	F	-	1,2,4 (Work)	1,2,3,4	6
7	47	F	40	3	1,2,3,4	2 - Not Mildly
8	42	M	Since childhood	1,2,3	1,2,5 (Manage for Wildlife)	3 (Atheist)
9	69	F	40	3	1,2,3,4,5 (Shrubs/Fruittree)	3, (Humanist/ Internationalist).
10	76	M	60	1,2,3	1,2,3,4	3 (Atheist)
11	64	F	46	1,2,3	1,2,4	2
12	53	M	10	2	1,2	3 (Neither)
13	25	F	6	1,2,3	1,2,3,4,5 (EXOTIC EDIBLES)	3 (Environmentalism and beekeeper and pest control expert)
14	60	F	57	2,3	1,2,3,4	2
15	26	M	2	3	1,3	2
16	67	F	40	2,3,4 (Volunteer)	1,2,3,4	1,2
17	63	F	52	3	1,2,3,4	3 (Practical Christian)
18	36	F	25	3	1,2,3,4	1,2
19	-	F	15	1,3	1,3,4	2
20	43	F	35	3	1,2,3,4	2
21	54	F	Since Childhood	3	1,2,4	1,2
22	65	F	28	3	3	2
23	58	F	40	3	1,2,3,4	2 (A little Bit) + None of the above.
24	71	M	66	3	1,2,3	3 – None of the above
25	36	M	12	3	5 (Maintenance)	2

The majority of the participants considered themselves to be spiritual (40%) with a smaller number of participants reporting they were both religious and spiritual (20%). To give context to this figure is difficult, as the UK census does not record spiritual affiliations. However in 2011, 68% of the population identified with some form of religious affiliation (ONS, 2012). A greater number of participants in this study

reported a wide range of additional responses under the category 'Other' including 'practical Christian', 'environmentalist', 'humanist' and 'atheist' (totalling 28%). The remaining participants left the box blank or preferred not to say.

The demographic data in phase two differs from that collected in phase one and reflects a wider range of gardeners, both in terms of gender and age but also in terms of the types of gardening they undertake. In relation to other studies, the demographic data supports much of the research surrounding gardeners that is reported more widely. For example, gardening tends to be undertaken by middle aged to older individuals and they often engage in a range of gardening practices, growing a wide variety of produce in a range of situations (Bhatti, 2009, 2014). The relatively open categories in which the demographic data was collected also allows for new data to be gathered in terms of how gardeners perceive the types of activities they undertake, with some highlighting categories of gardening activity rarely unacknowledged such as exotic edibles. The data collected also allows for new perspectives through the open categorisation of faith in which individuals often reported perspectives very different to traditional categorisations such as 'practical Christian' and 'environmentalist'. Such data allows for faith to be perceived much more widely and also gives some indication of the role that this may or may not play in individual experiences of gardening.

5.4.2 Stage One: Gardening Data

Analysis of the gardening data highlighted two key overarching themes that were identified across participants' individual gardening experiences and reflected in many of the gardening codes. These two themes were: gardening having both a practical and a transcendent component; and the human-nature relationship developed through gardening. In addition to these, a number of counter narratives were identified in the data and are discussed below.

Practical and Transcendent aspects of gardening

The interview schedule, although focused, collected a range of data that reflected a wide variety of personal gardening experiences. Participants discussed the practical features of gardening activity and their more personal and transcendent experiences.

This dichotomy is often reflected in gardening research, demonstrating the interaction between the practical physical realm and the ‘non-physical, seldom perceived’ mental realm which may include aspects of spiritual wellbeing such as transcendence (Lewis 1996 p.50). The practical matters discussed during the interview focused around planting and garden management whilst the transcendent perspectives tended to focus on meaning and purpose. Whether gardening was experienced as practical or a more transcendent activity was influenced by a range of features such as *time* and *garden space*, as outlined through examples below.

Time

Time in particular had an impact on whether participants had a practical or transcendent experience of gardening. Time was an issue for all gardeners, with most feeling that they didn’t have enough time in the garden; *‘Right we’ve got two hours, we’ve got to do as much as possible!’ (Participant 6)*. Due to time constraints, gardening was primarily perceived by some participants as a task to be managed and a job to be completed, albeit an enjoyable one. Whilst the garden provided a sense of relaxation for participants juggling work life and family life, these participants also found the lack of time frustrating,

‘I go out there and think right I’ve got to do that, and I’ve got to do that, oh and I’ve got to do that and it’s frustrating because I can’t do any of those things in the time that I’ve got. (Participant 4).

This lack of time to be spent in the garden and to devote to gardening activities was supportive of gardening

Researcher reflection – As a researcher it was often quite difficult to encourage participants to consider their gardening activity beyond the practical. Often during interviews there appeared to be a need to ‘keep things in perspective’ and acknowledge the fact that ‘it’s just a garden’. When the conversation had become too abstract, some participants would focus their experiences back down to the practical. These data may also reflect the practical nature of gardeners and highlights an apparent reticence to think about the garden in a transcendental manner and to negate the importance it plays in their lives.

being perceived in a more practical fashion.

In terms of transcendent experiences the garden was identified as a good place to reflect and think when time allowed, *'In the garden its slower, slow things down and just look at things'* (Participant 19). Some participants who seemed to have more leisure time to devote to their gardening activity found the experience of time in the garden supportive of transcendent experiences.

'I like to get a cup of tea about six o'clock and take a nice walk up the garden, don't touch anything, just look, you're seeing more at that time of day, you're seeing different things' (Participant 24).

The garden was seen to slow things down and as such engender a more relaxed, open perspective. Participants with little free time however often struggled to experience any transcendent aspects of gardening, as limited time was perceived to prevent rumination and deeper consideration.

Time is important because 'If they are to have a restorative effect, gardens must be havens of rest as well as places of toil' (Norfolk, 1988 p.241). Lack of time to enjoy the space, let the mind wander and notice, might hinder the spiritual wellbeing benefits that a garden can offer. This idea is also reflected in the work of Heintzman & Mannell who noted in their study that reduced leisure time meant that individuals were 'less likely to experience the spiritual functions of leisure' and 'more likely to experience lower levels of spiritual wellbeing' (2003 p.225). Having time to reflect and notice in the garden may be supportive of transcendent experiences, allowing participants to think beyond the practical tasks to be done. This reflection time could also allow participants to notice the detail in the garden and ruminate on the wider natural context. Time was highlighted as an overlapping theme in both Phase One and Phase Two and as such is discussed further in the overall discussion and synthesis section of this study.

Garden space

The experiences encountered during gardening and the perspective on gardening taken by participants (either practical or transcendent) during the interview was also reflected in how they thought about the garden space. Practical perspectives often identified the garden space as focused around one particular feature. For example for some participants the garden was a productive area; *'I grow fruit and vegetables, so that's pretty satisfying... it puts food on the table'* (Participant 17). This perception of productivity gave the garden space value and a sense of meaning and purpose.

Transcendent perspectives of the garden and gardening appeared much broader and all-encompassing. Participants who held these perspectives tended to highlight the garden as a space reflective of wider issues. The garden and gardening was seen as a space and activity undertaken both with and in support of wider nature or as a place to support personal wellbeing through relaxation. These wider perspectives appeared to encourage a heightened sense of awareness in the garden and the opportunity during relaxation to notice the unseen aspects of the garden space.

'I was going to grass it over, so I took up the paving slabs and I think I was just looking at the soil and I thought it was fascinating that there was so much going on around you' (Participant 4).

'It's quite an important place to hang out and I manage it quite a lot for wildlife as well' (Participant 8).

Gardens can hold a variety of meanings for individuals, from a place of order and power, through to a place of personal expression and healing (Francis & Hester, 1999; Unruh, 2011; Freeman et al., 2012). How individuals perceived the space as either a practical space or one supportive of more transcendent aspects of life helped to identify the overall meaning that participants placed on their garden activities.

Despite the differences between the practical and transcendent perspectives it also became clear during the analysis that these perspectives often overlapped. When explored further with participants, some everyday practical gardening tasks and

settings opened up to reflect a deeper more transcendent experience. As such, the data highlighted that gardening activity reflected a wide range of experiences for a variety of people. Consequently the gardening data alone did not provide a clear overview of the gardening experience, but linked numerous issues in a variety of ways. The research aim merges gardening with the concept of spiritual wellbeing and this study goes on to highlight participants' shared perspectives on gardening and how these may support spiritual wellbeing.

The human-nature relationship in gardening

Some of the comments made by participants supported and developed the findings regarding the human-nature relationship that had been identified in Phase One. Gardens hold a variety of meanings for individuals (Gross & Lane, 2007; Freeman et al., 2012) and as such a variety of relationships to nature can exist therein. In Phase Two, gardening was explicitly referred to in terms of enabling a meaningful relationship with nature by many participants. Comments included describing the garden as a friend or even a member of the family:

'So at the end of the weekend I was saying goodbye to him and he said, "So who are you going back to?" And I said, "No one. I'm on my own." And then he said, "Well haven't you got a dog or something?" I said, "No I'm terribly allergic to dogs and cats, but I've got my garden to go back to." And he couldn't understand the significance' (Participant 21).

Whilst others didn't feel as strongly, they did recognise the importance of the relationship that developed between gardeners and garden and the integral role it played in their lives often from childhood through to present day:

'We lived in inner city Leeds which hardly had a blade of grass, there were demolition sites all around us, post-war slum clearance...And I can remember making a teeny-weeny garden with rock sedum, the little yellow star, and it was just growing amongst the bricks. And that was my garden...I would have been very young then' (Participant 9).

The ongoing relationship with nature through the garden was developed and supported not just in the process of gardening, but also in the daily interaction with the plants and the overall time spent interrelating with the space over a number of years. For example, some plants were reflective of periods of their life, such as anniversary gifts *'The trees we were given as a wedding present'* (Participant 5); or particular seasons or previous gardens, The relationship with the garden held a very important place in some participant's lives as the space had become imbued with the memory of loved ones who had passed away:

'My wife died and I would like to talk about her as the garden is very much an expression of her, I only began to learn gardening after she died and now I can see why she had put a particular plant there' (Participant 10).

As such, the natural space was reflective not only of a supportive relationship in itself but as a living reminder of a relationship with another person and therefore held overwhelming value.

In terms of a meaningful relationship, many of the comments reflected the less positive aspects of the relationship, the failures, the poor weather, pests and diseases etc. Initially during analysis, such comments were seen as unsupportive of a human-nature relationship, but upon reflection actually demonstrate the authenticity of the relationship as one that is not perfect, but has its ups and downs, *'When you have failures you think OK that didn't work...there are always failures in gardening but that's life'* (Participant 2). The negative themes highlight the intricate nature of gardening and both the negative and positive aspects of life. This was demonstrated in the fact that during the coding process some positive codes had multiple subsidiary codes e.g. stress and pressure were perceived as positive but also negative.

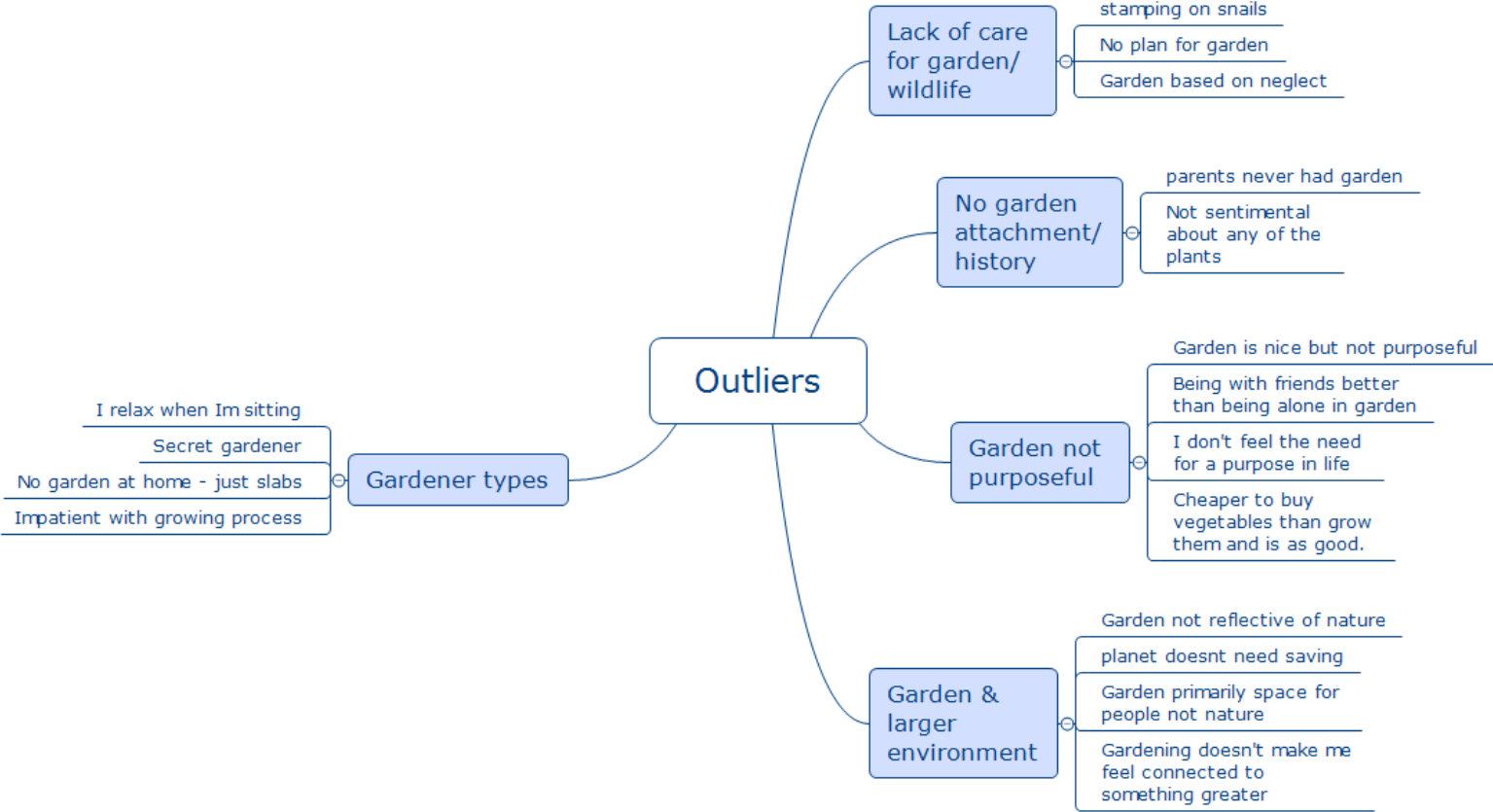
Participants talked about how they talked to their plants and cared for them; *'I couldn't leave them, they're like my babies...I want them to be looked after'* (Participant 3). This indicates that the care and commitment felt toward nature in the garden can be similar to that felt in human relationships. All of these aspects reflect

the sense of relationship with nature through the garden and this formed part of the analysis in terms of how spiritual wellbeing might be supported and developed by this relationship. The data began to point towards which aspects of this relationship might be supportive of spiritual wellbeing, based on participants' conceptualisations of spiritual wellbeing and those considerations formed the next stage of findings.

The value of counter perspectives and outlying data

The coding process identified several themes that offer a counter perspective and highlight the diversity of the relationship between gardeners and their gardens (see Figure 5.3). These themes included: a lack of care for the garden and wildlife; No sense of attachment to the garden or shared history; the Garden seen as not purposeful or reflective of wider nature; and several distinct "Gardener Type's", reflecting different motivations and focuses to the majority of the participants.

Figure 5.3: A mind map of the themes identified in the outlying data



Counter perspective comments tended to be reflected by the few participants who identified gardening as an occasional hobby; these participants often had limited access to a garden or gardened rarely. In some cases these participants found the gardening process to be very practical and as such had little sense of greater meaning or purpose in their lives;

'I wouldn't say that gardening makes me feel connected to something larger... I understand there are larger ecosystems at work, but I wouldn't say gardening makes me realise that' (Participant 13)

The garden did not reflect wider nature for some participants, but was seen as little more than a patch of land that required maintenance and could be a chore; *'It's a job to be done' (Participant 1)*. However, these comments appeared to still reflect a human-nature relationship, but one that was much weaker than the relationship reported by the majority of participants. For example, some participants identified the role of nature in the growing process but perceived the garden as being separate from themselves and did not identify a sense of partnership. This detachment was in contrast to other participants who reflected passionate narratives that reflected the challenging but enjoyable aspects of working in partnership with nature. These counter narratives reflect a disinterest in any sense of a human-nature relationship. They expressed this sense of detachment through a lack of emotion if plants died, no sense of shared history with the garden and a general lack of care for the space.

'I'm not very good, I forget to water them and they die on me... but they're plants... if you kill something you can always go and get more (Participant 12).

'shove 'em in and see if they grow, if they don't grow, shove some more in!' (Participant 17).

This lack of care was also often reflected by participants in their sense that the garden could cope alone, expressing that nature didn't need additional care or attention. This feeling may have been fuelled by their perceptions of not being very good at gardening, which they also expressed. As such their experiences had taught them that

nature could cope alone and that they wouldn't be able to help anyway. This sentiment of nature being able to cope alone is also often reflected in individuals with a deep ecological perspective (as it reduces the importance of human agency) (Taylor, 2010). However, when these comments are reviewed in relation to the entire interview of these participants these comments seemed more reflective of a lack of overall care and connection to the garden space.

5.4.3 Stage Two: The spiritual wellbeing question

The interview schedule contained one question designed to specifically ask participants about spiritual wellbeing. This question provided the data that supported the development of key themes that reflected participants' understanding of spiritual wellbeing. These themes were developed through initial coding of the story and answer aspects of the participants' responses. As discussed previously, when asked to describe spiritual wellbeing, participants gave an answer and a story. Often the story (which typically centred around gardening) provided more illuminating data and did not necessarily reflect the initial answer given. Figures 5.4 and 5.5 show how the themes were developed from participant comments in terms of both the answer and story portions of their responses.

It is important to note that the interview schedule (when relating gardening to spiritual wellbeing) also asked participants if gardening detracted from their spiritual wellbeing. This was considered an important aspect to consider as although the research focus was on positive benefits, negative experiences provide a counter balance that may help to better explore what participants understand as constituting a positive benefit. None of the participants interviewed stated that gardening detracted from their spiritual wellbeing and even aspects perceived to be negative were perceived as positive, e.g. losing crops built resiliency. Asking about detraction was considered beneficial as it also provided a counter perspective in the interview schedule and reassured participants that all their experiences of spiritual wellbeing gardening were being considered.

Figure 5.4: Mind map showing themes developed from the spiritual wellbeing question 'answers'.

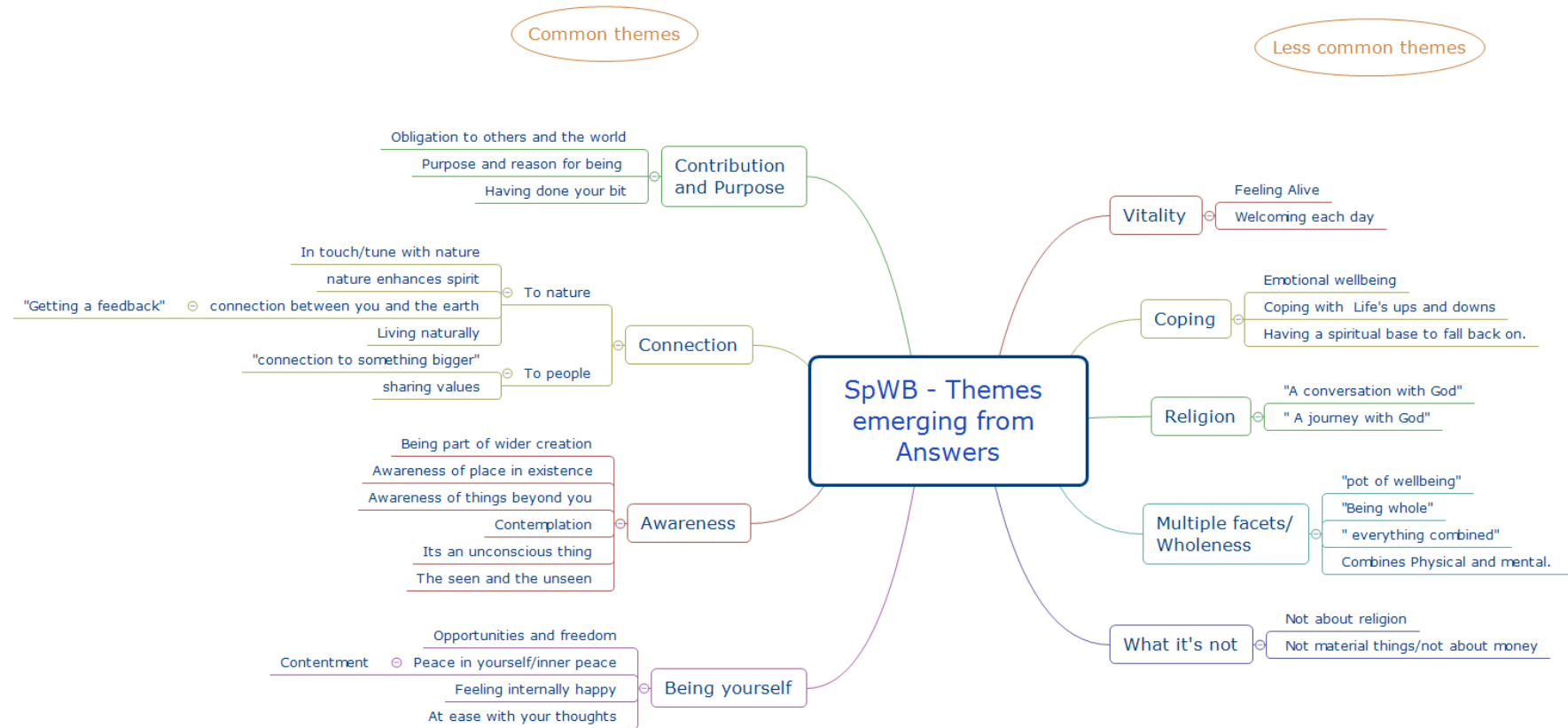
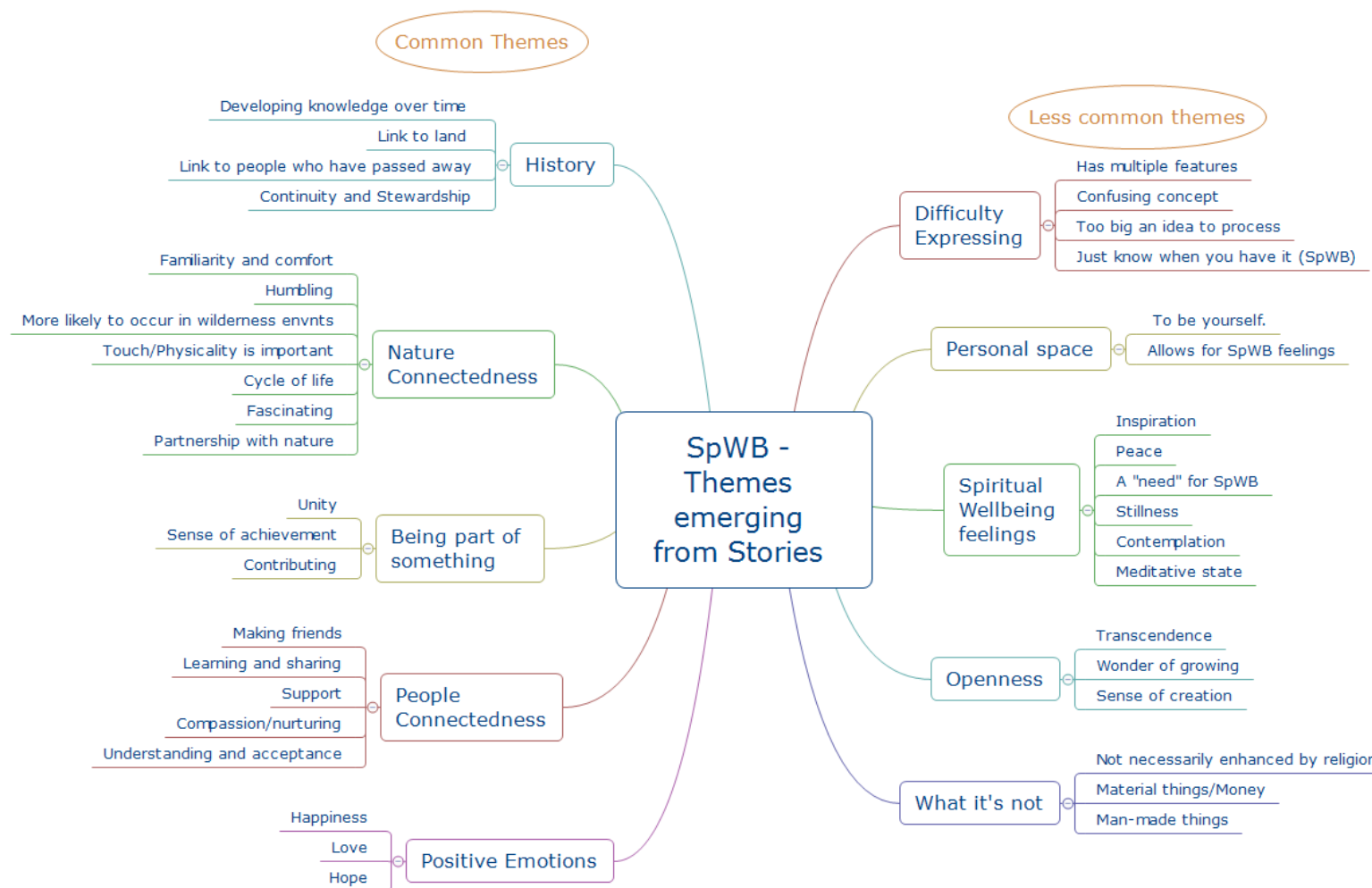


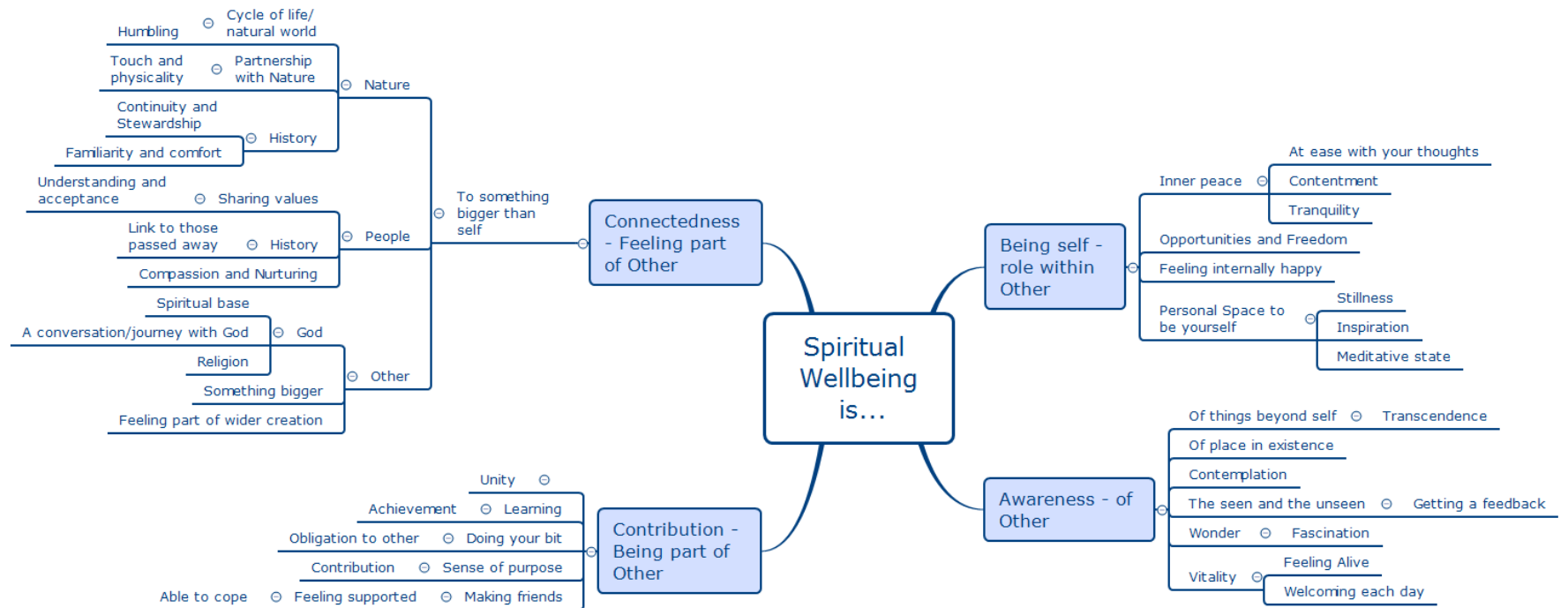
Figure 5.5: Mind map showing themes developed from the spiritual wellbeing question 'stories'.



Introducing Key Themes in the answer and story data

Participant comments regarding spiritual wellbeing suggest that it is perceived as consisting of multiple features. The analysis process began to identify links between the main categories of spiritual wellbeing. For example the 'personal space' category from the story data shared many common features with the 'being yourself' category from the answer data and was thus merged together to create the 'Being Self' theme. In total, analysis of the data identifies the following four key themes as reflective of spiritual wellbeing, they are Contribution, Connection, Awareness and Being Self. These themes were developed from the most common responses given by participants. The themes were developed by identifying a small number of overarching concepts which were reflected in both the answer and story elements of the participant responses. These concepts were then mapped against the codes and it became apparent that the majority of the codes coherently fitted within the themes identified. Figure 5.6 outlines the working definitions and understanding of these key themes as shaped by both the literature and the participant comments.

Figure 5.6: Definition and conceptualisation of spiritual wellbeing themes



Development of the key themes.

This section outlines some of the participant comments made in response to the spiritual wellbeing question that helped to identify the four key themes of Connection; Awareness; Being Self and Contribution. Participant comments that reflect the spiritual wellbeing themes in relation to gardening are discussed in section 5.4.4.

Connection

Connection was identified as a key aspect of spiritual wellbeing in relation to both connection to other people and connection to nature or something else bigger than oneself. Connection was seen to reflect not only shared values and a sense of being in tune with something other than oneself, but also connection expressed in an emotional and physical sense. One participant talked about a dance class they attend which they felt supported their spiritual wellbeing, and the key features they highlighted expressed the importance of this sense of connection and unity:

'I go to world circle dancing...you are holding hands and there is something very strong about joining together, not just physically but mentally and emotionally when holding hands...it gives you that feeling of unity' (Participant 2).

This sense of connection was also talked about in terms of a relationship, with some participants highlighting that *'spiritual wellbeing is having the right kind of relationship with whichever higher being you believe in' (Participant 3)*. Relationships and a feeling of connection to something were considered to be important aspects of spiritual wellbeing by many of the participants. This sense of connection is highlighted in the literature as a feature of spiritual wellbeing and is also considered by some to be the 'essence of meaning' (Baumeister & Vohs, 2002). This would imply that a sense of connection is also possibly reflective of a sense of meaning and purpose in life, another key feature of spiritual wellbeing.

A feedback element was highlighted as important in relation to this sense of connection and relationship with something other. Participants identified giving and receiving support as being important in strengthening and demonstrating connection; for example spiritual wellbeing was identified as *'living naturally and communally... not*

a dog eat dog world' (Participant 15). This sense of feedback, in which one offers support and feels supported, was seen as an important feature of a sense of connection or meaningful relationship.

Awareness

This theme was identified as an aspect of spiritual wellbeing by participants in relation to being aware of something other than oneself. This was reflected by participants not only in being aware of a higher being but also in the form of larger processes such as the cycle of life:

'I don't believe in a higher power, I just think that everything combines, there is a sort of odd symmetry that hints at something beyond what we understand' (Participant 4).

Spiritual wellbeing was often expressed as a greater level of consideration of ones place in relation to those larger processes and of things beyond yourself; *'it's about being aware of your place in the world or your place in nature'* (Participant 11).

Awareness as a theme was also reflected in terms of the transcendent and the unseen aspects of life; *'An awareness of things beyond you...beyond the everyday'* (Participant 14). Participants also expressed that spiritual wellbeing is an awareness of the important aspects of life; *'An awareness that life isn't about things and money... but about love, faith and hope'* (Participant 21). In terms of the story answers, it was evident that this theme of awareness also supported and strengthened other themes, for example, being aware of a connection to something:

'Around dusk time I had seen a fox come out and walk up the garden towards me... you feel a tingle in your body and you feel all your focus shifts to that one single thing and you have that brief moment of perceived connection whether it's there or not, where you look at the fox and the fox looks at you, then it trots off, those moments are quite special... you feel privileged to have those moments, I think that's a type of spiritual wellbeing' (Participant 1)

Awareness as a theme perhaps offers the clearest links to spiritual wellbeing as it not only links to other spiritual wellbeing themes but also appears to be supportive of transcendent moments. Openness was one of the features of spiritual wellbeing highlighted by participants and was clearly linked to the theme of awareness. Openness or receptivity has been highlighted as a key feature in spiritual experiences and spiritual wellbeing as it encourages an 'open minded attitude' thought conducive to noticing the spiritual aspects of an activity (McDonald & Schreyer, 1991 p.183). Openness appeared to promote a greater awareness and acknowledgement of the transcendent aspects of life, with such moments allowing the time for consideration of "the other" outside of oneself, an activity highlighted as an important part of spiritual wellbeing (Heintzman & Mannell, 2003).

Being Self

Participant comments reflected a need for time, space and a relaxed situation in which they could express themselves. All of these features were deemed to be conducive to experiencing spiritual wellbeing through developing a sense of inner peace and contentment; *'It's being content in yourself, because if you're content in yourself then you've got spiritual wellbeing'* (Participant 24). This sense of peace was also considered to be something that was accessible without requiring any additional things, as something innate that someone could harness and develop; *'A sense of inner peace... that is not as a result of anything material'* (Participant 7). This freedom to develop and experience a sense of inner peace as an individual was seen as an important aspect of spiritual wellbeing for many participants. Spiritual wellbeing was reported as suffering when one was unable to access this freedom to express oneself; *'Our souls suffer, our spirits don't thrive'* (Participant 20). Consequently having the capacity to recognise that sense of inner peace and the freedom to harness it were key aspects of being one's self and important in the development of spiritual wellbeing.

The theme of being self was identified as being important in terms not only of contentment with oneself personally, but also one's place amongst others. For some participants spiritual wellbeing meant *'to feel at peace with one's place in the cosmos,*

in nature, to feel connected and supported' (Participant 19). A sense of being self, therefore did not only apply to the inner personal journey one takes; relationships with others and feeling comfortable with one's role in those relationships was also considered important in spiritual wellbeing:

'It's (spiritual wellbeing) having the right kind of relationship with whichever higher being you believe in...being content with whatever I was feeling' (Participant 3).

This comment in particular also begins to highlight overlap between the theme of being self and connection, thus indicating the interrelated nature of the themes.

Contribution

Contribution was identified as engaging with something other than one's self, and also one's role within that other. Spiritual wellbeing through a sense of contribution was identified as, *'Having a sense of the whole of existence...the sense of continuity...looking after other creatures' (Participant 9).* Perhaps due to the focus of the interview, many participants made reference to their work within the garden as a form of contribution, but some also reported human relationships they were part of such as neighbourhood groups and social clubs. Contribution here was clearly linked to a sense of connection, with contribution strengthening that sense of connection and giving the individual a role within the other; *'A sense of having done your bit...a sense of obligation to others in the world' (Participant 14).* Being part of something bigger than oneself was also important for many participants:

'Seeing yourself as part of a bigger whole... being an important part of that... having a meaning and purpose and reason for being there' (Participant 16).

This experience of contribution offers a sense of meaning and purpose to life, something identified in the literature and by the participants as a feature of spiritual wellbeing. Consequently Contribution appears to be linked to a variety of spiritual wellbeing features and it interrelates with the other themes.

Two additional sub themes were initially present, those of *history* and *positive emotions*. However as these themes were reviewed as a whole it became apparent that 'history' was perhaps best reflected in the overall themes of awareness and connection. 'Positive emotions' was identified as an underlying aspect of all the themes and was often utilised by participants in their expression of spiritual wellbeing.

Counter narratives regarding spiritual wellbeing

Although most of the participant answers mapped clearly against the identified key themes, there were a number of outliers, and comments that identified what spiritual wellbeing did not consist of. This alternate perspective was often expressed in direct relation to the spiritual wellbeing questions as some participants found it easier to identify what spiritual wellbeing wasn't than something it was. For the participants in this study, key features highlighted as not necessarily present in spiritual wellbeing were material goods, man-made things and formalised religion. These three areas were raised across both the answer and story responses.

The lack of importance of focus on material assets and money in spiritual wellbeing was highlighted by many participants. This could imply that spiritual wellbeing is based around aspects of life that cannot be purchased and as such could suggest that it is more likely to be present in natural spaces. Some of these sentiments are reflected in the literature which identifies spiritual people as 'appreciating material goods but not seeking satisfaction from them' (Elkins et al., 1988 p.12), and natural spaces and settings as spiritually enhancing places (Taylor, 2010; Fox, 1997; Stringer & McAvoy, 1992). Many nature-based activities take place outdoors and do not necessarily involve large amounts of material goods and as such may be seen as supportive of spiritual wellbeing.

Formalised religion was not explicitly referred to by the majority of participants when discussing spiritual wellbeing. The findings suggest that there appears to be little difference between the answers given to the spiritual wellbeing question by those participants who identified themselves as religious and those who identify themselves as not religious. All the participants' stories and answers reflect the four key themes of

Connection, Contribution, Awareness and Being Self. The only noticeable difference in the responses, was that three of the participants who defined themselves as ‘Religious and Spiritual’ included some reference to God, a higher being or religious locations such as a church in their answers. Despite this, a matrix analysis of the spiritual wellbeing question data and the faith focused demographic data (Appendix J) suggests that adhering to a particular religion seemed to have little influence on participants’ overall conceptualisation and understanding of spiritual wellbeing.

The lack of a strong link between religion and spiritual wellbeing was also supported by literature which identifies spirituality as not necessarily being reflective of religion (Casey, 2009). In terms of this study, Figure 5.4 also highlights religion as a less common aspect of spiritual wellbeing and Figure 5.5 suggests that religion was not considered reflective of spiritual wellbeing by most participants.

5.4.4 Stage 3: Consolidation of analysis – merging spiritual wellbeing themes and gardening experiences

A review of the transcriptions highlighted that many of the gardening experiences recounted by participants which were highlighted as being reflective of spiritual wellbeing reflected the four key themes they associated with spiritual wellbeing. The next stage of analysis then mapped the gardening codes against the spiritual wellbeing themes.

Table 5.6 gives an example of the mapping process of participants’ comments to the gardening codes and those codes to the spiritual wellbeing themes. The findings and discussion below offer an overview of the participant comments regarding their gardening experiences as reflective of each of the four spiritual wellbeing themes.

Table 5.6 Illustration of the coding process of the qualitative gardening data

Example quote	Example Code	Spiritual wellbeing theme mapped against gardening data
<i>‘It connects me with the seasons and wildlife and nature ...something more important and ongoing</i>	Connectedness	

<i>than yourself' (Participant 8).</i>		Connection
<i>'You're giving and receiving...Gardening is giving me something and hopefully I'm giving it something' (Participant 4).</i>	Unity/Working in partnership with nature.	
<i>'I just stopped and smelt the incredible, wonderful scent' (Participant 19).</i>	Senses	Awareness
<i>'I see a worm scurrying off and I think I wonder what he's doing? I wonder what occupies his day' (Participant 24).</i>	Wonder/Positive Emotions	
<i>'when you're feeling like you really want to achieve something... then you can stand back and look at it and go, "Wow! It's done!"...with gardening you can feel really, really achieved' (Participant 6).</i>	Achievement	Contribution
<i>'I'm curator for the time I'm here' (Participant 21).</i>	Stewardship	
<i>'I'm the one who's chosen those colours' (Participant 5).</i>	Creative	Being Self
<i>'I need that space and quiet to reflect and think and be me' (Participant 21).</i>	Personal space/Activity time.	

Connection and the Gardening experience

Gardening was highlighted as a form of nature connection and a process by which one could feel a unity with something greater than themselves; *'It's a connection between you and the earth' (Participant 6)*. In addition to this, the connection to the garden was felt on a very deep personal level with some gardeners referring to the garden as a friend or a member of the family,

'When I've got slugs or snails I'm like you little bastards!...how dare you? It's like, I don't know, someone coming to harm one of my children or something' (Participant 7)

This connection was also thought to be two-way with some gardeners highlighting a sense of unity with the garden; *'In the garden it's a unity...that you are part of it and it is part of you' (Participant 2)*. Others felt the garden responded to their care; *'I nurture it, really, I think if you really care for it, it responds' (Participant 22)*. Therefore this

sense of connection was identified as not just something felt by the participants but also something reflected in nature's response through a successful growing season in the garden.

The sense of connection was also highlighted by some home gardeners as a human connection to their ancestors who also grew food and tended the land. This historical human-nature connection was something recounted by participants who identified their stewardship role as connecting them to gardeners before them.

'There's a heritage in gardening ...it's not like you're starting from scratch, it connects you to other people... the first cultivators' (Participant 15).

This sense of history and connection through learning and taking part in the growing process reflects an additional aspect of human-nature connection that goes beyond the individual gardener.

Awareness and the Gardening experience

A heightened awareness of something other than oneself was highlighted by many participants throughout the recounting of their gardening experiences. This sense of awareness was reflected by participants reporting an increased awareness of large-scale aspects and features of life beyond the everyday. This awareness was often expressed through instances of positive emotions experienced when gardening, and through descriptions of the slow and cyclical nature of the growing process:

'the sheer wonder of seeing things survive and come back and grow, the cycle of life and the seasons... you get to see it in tiny increments throughout the year... you see things growing' (Participant 20).

The theme of awareness was also reflected in a much more physical way and highlighted simply through the process of taking time to look and notice the garden and nature. Gardening was identified as an activity that provided a natural space in which to experience the sense of wonder but also the slower pace and time to focus on it.

'you're out there with the cars and the traffic and the busyness and you come into your garden and just move around slowly and have a look around... that just calms me' (Participant 18).

On both a macro and micro level gardening provides a setting through which increased awareness can develop, and an activity in which taking time to notice is part of the process.

Being Self and the Gardening experience

Being Self as a theme was often expressed by gardeners throughout the course of the interviews. The gardens themselves all reflected the individual participants and many participants viewed their gardens as a creative space; *'It's the only way I can be creative really' (Participant 3)*. Others identified the garden as a personal sanctuary, *'bits of my life are a bit hectic... I do like to disappear down the garden' (Participant 10)* or a place in which they could just be themselves:

'It's acceptable to get dirty when you're gardening...mud on my face and leaves in my hair... where else would I get dirty?' (Participant 13).

Having the space to be yourself, to find out who that is and to be comfortable with that provides a form of self-acceptance often viewed as an aspect of spiritual wellbeing (Van Dierendonck, 2004). Participants' experiences suggest that gardens provide such a space in which this sense of self can be supported.

Some participants also recounted the fact that gardening reminded them of their place in the greater scheme of things, *'it completely grounds me...there's a sense of my place in life when I'm in the garden' (Participant 21)*. Participants reported that they were happy with their place and that it gave them perspective,

'We've always been part of nature...I think there's something about being human that needs to interact with the rest of the living world' (Participant 8).

Gardening and working within nature forced participants to recognise their lack of control in some aspects of the growing process. In some instances, this lack of control proved frustrating, but in others it was often found to be reassuring:

'Human beings think they're in control and they can control life... but the bigger picture is nature...there's a consistency in the fact that nature is always there and you can't argue with it... I find it really reassuring' (Participant 7).

Gardening allowed participants to relinquish control, to recognise their place within nature and feel comfortable enough within that role to express their true selves. Whilst having a sense of being one's self or engaging in activities that offer a sense of being true to one's self is rarely reflected in general wellbeing measures, this feature is often thought to be conducive to spiritual wellbeing (Heintzman, 2000). As such activities in which one feels authentic and able to be oneself may well offer spiritual wellbeing benefits and could be promoted as such.

Contribution and the Gardening experience

Contribution was identified as a key theme, not only as a feature of spiritual wellbeing but also a mechanism through which the other three spiritual wellbeing themes can be expressed. For example, gardening as an activity fosters a sense of connection to and awareness of nature and the growing process. Contributing also allows an individual to be themselves in a situation, expressing themselves through gardening, relinquishing control and finding personal sanctuary within the space. As such the theme of Contribution is

Researcher reflection – The analysis process taught me some valuable lessons about the nature of qualitative data. For example some quotes were placed under multiple codes and I felt anxious to tidy the analysis up and keep a linear, clean process. Through working with the data and the methods literature I became more aware and appreciative of the multiple meanings of participant comments. I began to see them as reflective of organic conversation, providing valuable contrasting perspectives of the data and indicating its richness as opposed to its lack of robustness.

crucial in providing the situation in which spiritual wellbeing can thrive.

The theme of contribution is reflected more obviously in a sense of partnership which is the crux of the gardening process. This is reflected not only in the human-nature gardening partnership but also in gardening with others, through the sense of a joint endeavour; *'It's not just my garden, it's our garden' (Participant 5)*.

Contributing to the development and support of a garden space requires some degree of commitment, care and consistency. The contribution of physical, mental and emotional energy to the process of gardening gives the human-nature relationship a sense of purpose; *'I was so deeply unhappy...but the garden gave me a purpose' (Participant 21)*. Gardening also gives a purpose in the sense of working to improve something,

'Having some sort of agency in improving... or enhancing a piece of land is important, very important, essential for me' (Participant 8).

Consequently, the wellbeing benefits gained from contribution move beyond those felt by the recipient, providing a wellbeing feedback in which both parties feel the benefit; *'You come into contact with the earth and you have a two way appreciation' (Participant 6)*.

The feedback element implies that contribution has benefits for both those contributing and the purpose to which they are contributing to. The wellbeing benefits to the contributor from pro-social behaviours are evident in many forms of contribution such as volunteering (Greenfield & Marks 2004, Weinstein & Ryan 2010). Contribution in terms of gardening however suggests that interaction with nature may also be perceived as a beneficial pro-social behaviour that can benefit spiritual wellbeing.

In terms of the 'Less reflective' and 'Unsure' categories, analysis identified that there were four codes in the 'Less reflective' category that related to all themes, but were still not considered to be reflective of spiritual wellbeing. These four codes all

appeared to be 'negative' in sentiment, for example, 'Manipulation of nature', 'Responsibility for garden', 'Species loss', and 'Order and Control'. These codes are reflective of the fact that gardening may reflect a *relationship* between the self and nature. As relationships often involve negative aspects or negotiation, these codes highlight this aspect, reflecting that the relationships do not consist of solely positive features.

5.5 Findings from Further Analysis

5.5.1 Development of Spiritual wellbeing themes in relation to gardening codes.

Merging the gardening codes and themes identified the interrelated nature of the themes and areas in which they could be refined. This section focuses on the development and refinement of the spiritual wellbeing themes in relation to the gardening codes.

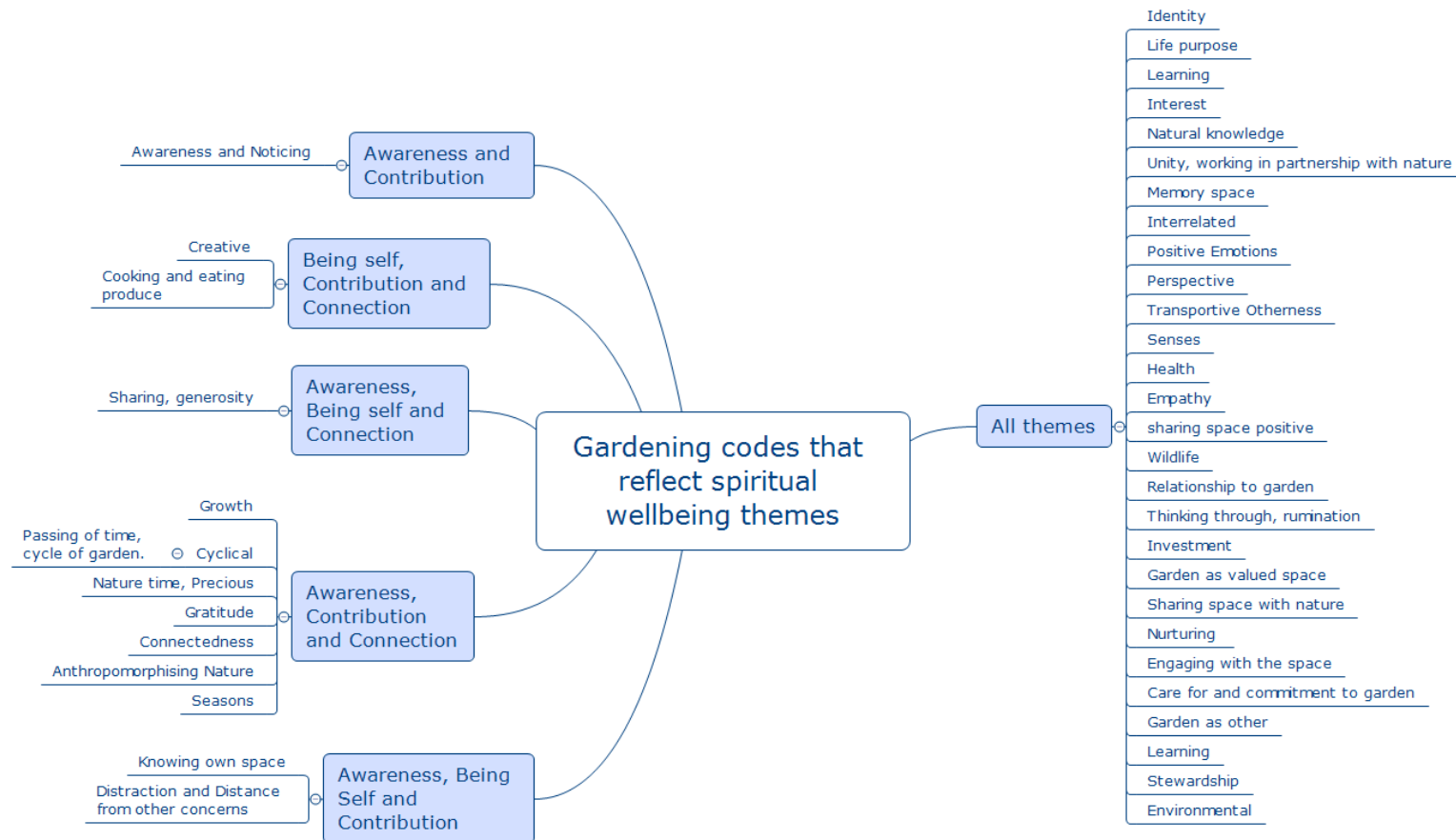
Analysis Method

The spiritual wellbeing themes of Connection, Contribution, Awareness and Being Self were allocated to each gardening code as appropriate. This categorisation was based on the researcher's understanding of the themes and the codes from the first stages of analysis and a reflection on the literature. For example the code 'Seasons' as expressed by the participants in relation to gardening seemed to reflect the themes of Connection, Contribution and Awareness. The frequency of occurrence of spiritual wellbeing themes in the 'Yes', 'Less reflective' and 'Unsure' categories were calculated. This was done in order to identify which themes were most common in the 'Yes' category. In the 'Less reflective' and 'Unsure' categories this process began to help identify why some codes were considered to be less reflective of spiritual wellbeing even though a number of the themes were present.

Figure 5.7 shows the mind map that was created when the gardening codes were categorised under the spiritual wellbeing themes. The mind map highlights the fact that many of the codes reflect all the spiritual wellbeing themes (i.e. those categorised under 'all themes') and a large proportion of the codes were linked to the theme of Contribution and Awareness. Contribution, whilst recognised as a standalone theme in

the analysis of the spiritual wellbeing data, appears to be primarily linked to another theme when mapped against the gardening codes. From this mind mapping process it became clear that the theme Contribution played a unique and unusual role in terms of gardening. Consequently further consideration was required into the role of Contribution and how the multiple themes may work together.

Figure 5.7: Illustration of the analysis process of linking the gardening codes and the spiritual wellbeing themes



Gardening codes reflective of spiritual wellbeing

The codes that reflected the greater number of spiritual wellbeing themes were identified as being most reflective of spiritual wellbeing. In addition to this, analysis of the 'yes' category also highlighted that, of the codes that reflected multiple themes, Contribution was the most prominent theme (42 occurrences), followed by Awareness (40 occurrences), Connection (39 occurrences) and Being Self (33 occurrences). Of the codes that were highlighted as 'less reflective' of spiritual wellbeing, Awareness and Being Self were the most prominent theme (32 occurrences each), followed by Connection (5 occurrences) and finally Contribution (4 occurrences). This suggests that the codes that are considered 'less reflective' of spiritual wellbeing reflect fewer of the four key themes and tend to be more self-focused. In contrast, gardening codes that reflect multiple themes tended to prioritise Contribution as a key theme and were more widely focused.

5.5.2 Interaction between the spiritual wellbeing themes

This section draws upon the further analysis that examines the links between the codes and between the themes and explores the interrelation between themes further.

Contribution is supported and developed by the additional spiritual wellbeing themes identified. Awareness as a theme is evident on two levels: for example, 'awareness of immediate space' and 'a greater sense of awareness on a universal level'. This higher level of awareness appears more reflective of a sense of spiritual wellbeing and is reflected in the sense of Contribution, i.e. an awareness of one's role in relation to others. Connection and Being self are also important themes, but these themes shift in importance in relation to Contribution, with Being Self, becoming less important than Connection after Contribution is added. This suggests that an increased sense of Contribution takes focus away from the self to the wider context.

Whilst a sense of Being Self has been highlighted as important in developing spiritual wellbeing by the participants, the results suggests that a greater sense of Contribution to those around you is perhaps more beneficial in developing spiritual wellbeing. This

finding differs from some of the literature on spiritual wellbeing, which tends to focus primarily on the individual inner experience or personal journey, and then secondarily on relationships with the outside world (Fryback & Reinert, 1999).

When exploring the relationship between the codes and themes it became apparent that if *Contribution* is important and *relationship to An-Other* is important in spiritual wellbeing then all of the codes relating to gardening reflect spiritual wellbeing in some form. This is due to the fact that most gardening activity involves these two features to some degree. The extent to which each gardening code relates to spiritual wellbeing is linked to the number of themes it reflects as outlined in Figure 5.8.

Figure 5.8: The sliding scale of spiritual wellbeing in relation to gardening

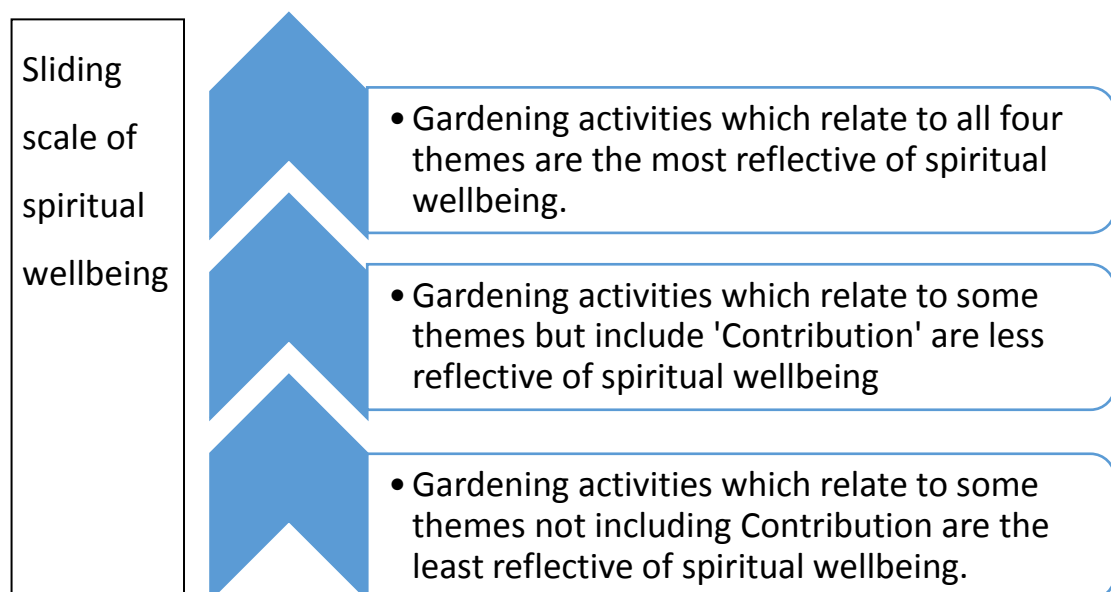


Figure 5.8 illustrates that spiritual wellbeing may exist on a sliding scale and, much like physical and mental wellbeing, it is not necessarily present or absent, but a continuum that can be lessened or increasingly enhanced. The concept of a sliding scale indicates that spiritual wellbeing as a feature in one's life could have multiple entry points and as such can be accessed through a range of gardening activities and levels of engagement. This approach reflects NEF five ways to wellbeing model which also works on a continuum model and identifies wellbeing as a process (NEF, 2008).

In summary, analysis of the codes and creation of the themes seems to suggest that some of themes have a greater role to play in developing and reflecting spiritual wellbeing than others. The theme of Contribution appears to be a lynchpin theme as it is related to all codes identified as reflecting spiritual wellbeing (i.e. those in the yes category). Contribution is also always linked to one or more of the other themes and, as such, could be classed as a 'process' theme, for example it reflects a process by which one demonstrates awareness or a connection or a sense of being self. Contribution appears to occur in a variety of ways, for example, *human-plant* such as gardening, *human-wildlife* when feeding birds in the garden or *human-human* (for example helping out at communal garden).

Contribution as a theme appears to encourage an individual to see beyond the self and develop meaningful relationships supportive of spiritual wellbeing. Some caution must be taken with these findings however, as gardening is an intentional nature activity and therefore involves an active component. As such, contribution is a clearly a key feature of the activity and therefore a prominent way in which it may support spiritual wellbeing. Thus caution must be taken particularly in terms of contribution, which may not be as important to more passive nature interaction activities such as walking where other spiritual wellbeing themes may be more dominant.

5.5.3 The spiritual wellbeing themes in relation to An-Other

The gardening data and the spiritual wellbeing themes highlight the importance of a meaningful relationship in developing and supporting spiritual wellbeing. The findings suggest that such a relationship may be comprised of an individual and 'An-Other' (as defined in Table 5.7). A relationship with An-Other provides the opportunity for the spiritual wellbeing themes to be expressed and developed. Gardening appears to offer such a relationship with some participants highlighting that for them nature fills the role of the An-Other.

Utilising nature as An-Other may be particularly beneficial to the spiritual dimension of wellbeing compared to human relationships. This may be due to the fact that 'by seeking a relationship with nature ... we may be able to connect with what is often a

spiritual sense of wonder at being part of a vast interconnected network’ (Vining 2003 p.89). As such a meaningful relationship with nature may encourage a widening of ones perspective to include the unseen, the incomprehensible and the larger processes at force.

An-Other was chosen as the phraseology for this relationship as it incorporates not only the difference between the individual and this Other but also the similarities, i.e. An-Other of the same thing. The concept of An-Other and the development of the phrasing is outlined in Table 5.7.

Table 5.7: Definitions and understanding of the An-Other concept

Key Concept	Understanding of the term based on current literature, participant comments and dictionary definitions.
An-Other	<ul style="list-style-type: none"> • ‘Other’ something separate from yourself – The sense and role of the ‘Other’ in Nature and Spiritual (Schroeder 1992) literature is reflected here. However in terms of nature, the term Other is sometimes used to focus on the distance between Humans and Nature (Hailwood 2000) and thus does not accurately reflect the ‘Other’ concept as referred to in spiritual literature or by the participants. • ‘Another’ - refers to more of the same thing or something sharing common attributes (Oxford Dictionary 2015). • ‘An-Other’ - was therefore chosen as the most effective term as it reflects both the distance and closeness as expressed by participants and brings together the nature and spiritual understandings.

As identified in this study, the concept of An-Other appears to be a central component to spiritual wellbeing. An-Other alongside the individual constitute two parties that can establish a meaningful relationship. This meaningful relationship appears to be at the core of spiritual wellbeing and as such a place in which the spiritual wellbeing themes can be developed and expressed as outlined in Table 5.8.

Table 5.8: Key themes in relation to the overall concept of An-Other

Key Themes in relation to concept	Understanding of the term based on participant comments and dictionary definitions.
Connection - Feeling part of 'An-Other'	Connection involves feeling part of something greater than oneself, 'a relationship in which a person or thing is linked or associated with something else' (Oxford Dictionary 2015). Participants' report that Connection offers a sense of shared values, familiarity and interrelatedness, all of which are considered important to spiritual wellbeing.
Awareness - Awareness of 'An-Other'	Awareness is reflected in the 'knowledge or perception of a situation or fact' (Oxford Dictionary 2015). Participants' report that awareness of An-Other in life, helps to develop a sense of things beyond the self and greater than the everyday, and that this awareness of the transcendent aspect of life is beneficial for spiritual wellbeing.
Being Self - Sense of self in terms of 'An-Other'	Being Self reflects your place and sense of self in relation to An-Other. Participants report that contentment with your role/self helps to develop inner peace and happiness and as such is important in spiritual wellbeing.
Contribution - Being part of 'An-Other'	Engaging with 'An-Other', to contribute to something greater than oneself is closely linked with a sense of purpose. Having a role which you value and are contented with helps to create a sense of unity and develop a support network, all of which participants deemed important to developing spiritual wellbeing.

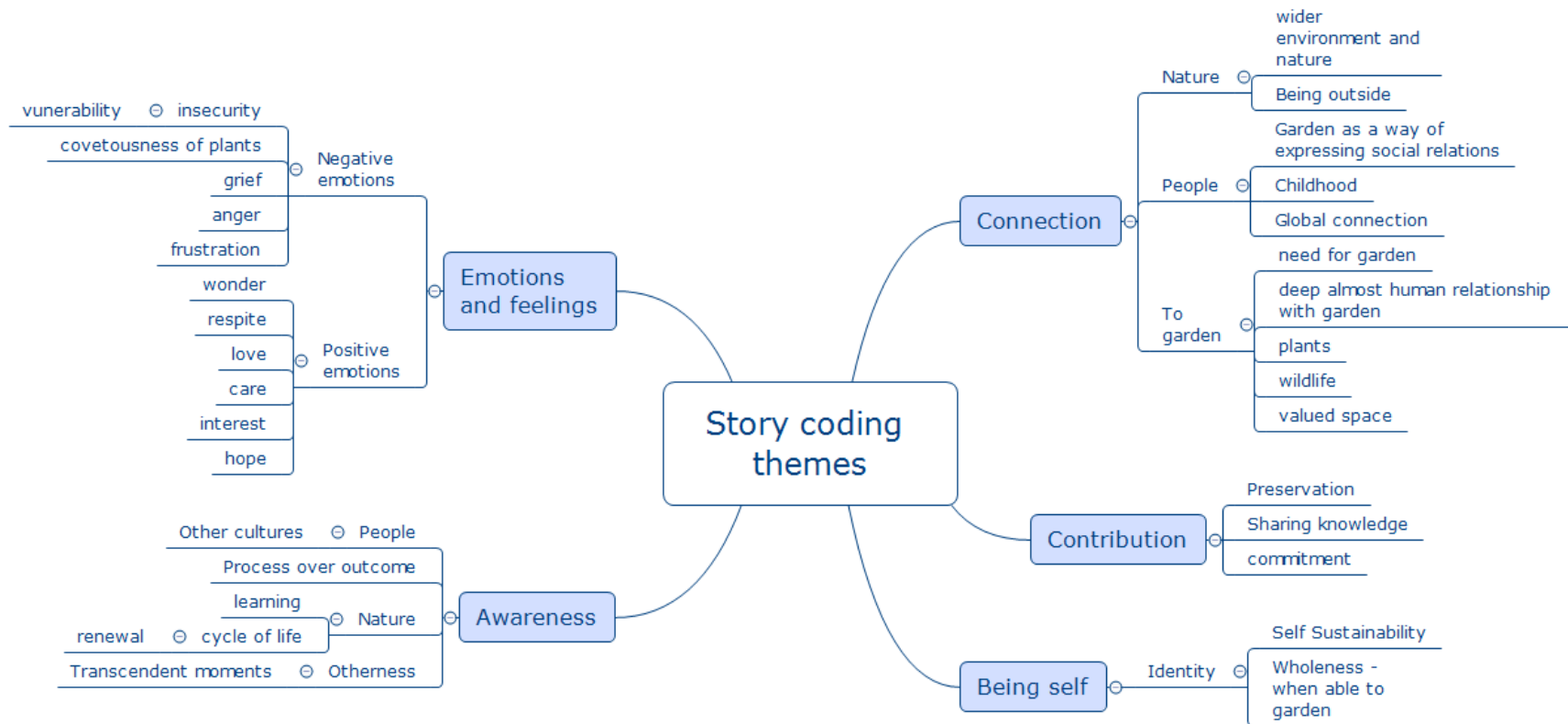
5.5.4 Story Coding and the lived experience of gardening and the spiritual wellbeing themes

Some of the stories told during the interviews by participants became apparent as another way in which their gardening experiences and the spiritual wellbeing themes were brought together. As such, story coding was undertaken on a sample of these stories to identify the ways in which the themes and codes work in terms of the participants' lived experience.

The analysis process for this data involved first identifying the stories to be coded. The stories were selected from six scripts chosen via maximum variation sampling to maximise the scope of the exercise (Patton, 2005). Maximum variation sampling ensures that a wide range of participant views are expressed by including examples

from the extreme cases, e.g. the youngest or oldest participants. The stories were first read through to aid familiarisation and then initial codes were developed and a mind map was created to show how elements of the stories reflected the spiritual wellbeing themes (Figure 5.9). Once it was apparent there were links between the stories and themes, the stories were then analysed using a story coding framework (Appendix K), partially influenced by Hines et al (2014) and partially from the spiritual wellbeing themes of the study. The framework focused on: *relationships*; *experiences* and *feelings*; and *insights*. The *relationships* category focuses on the connections encountered, the key characters in the story and their relationships to each other. The *experiences* and *feelings* category helps to understand what emotions the story includes and allows consideration of the story to move beyond the practical. *Insights* is a common category designed to scratch the surface of the story to identify the overall purpose of its telling. Once aspects of each story were allocated to a category, it allowed for a wider overview of how the spiritual wellbeing themes were apparent in the stories.

Figure 5.9: Mind map showing key themes taken from the story coding process



All the processes of analysis undertaken between the gardening codes and the spiritual wellbeing themes including the story coding process, helped to refine and develop the themes further. The four key themes of Connection, Contribution, Awareness and Being self were then reviewed in light of current literature in the fields of inquiry in order to answer the research aim as discussed further in chapter 6 – Discussion and Synthesis.

5.5.5 Participants' difficulty expressing perceptions of spiritual wellbeing

Difficulty expressing personal perceptions of spiritual wellbeing was an issue for all participants throughout the research and as such was identified as a key feature.

Many comments were expressed throughout the interviews which identified the range of emotions encountered whilst trying to verbalise an understanding of the concept. These comments gave some insight into the types of difficulties that are faced when discussing spiritual wellbeing (Table 5.9).

Research into the spiritual aspects of life including spiritual wellbeing often reports that participants find it 'difficult to verbalise what they have felt' (McDonald & Schreyer 1991 p.181). The issues faced in this study in terms of defining spiritual wellbeing raise important questions about the phraseology of spiritual

Researcher Reflection: The difficulties participants experienced in expressing themselves taught me as a researcher an important lesson regarding how questions are phrased and framed. As I was aware of the potential difficulties in conceptualisation I often preloaded the question with language reflective of this, e.g.. 'this might be tricky to answer', 'you may find this an unusual question'. This may have made some participants less sure of providing a swift definitive answer. This is an area where my confidence as a researcher grew throughout the study as I became more assured in the question I was asking and the participants' ability to answer it.

wellbeing; this issue was highlighted by some participants putting forward alternative terms such as ‘the human spirit’ or ‘holistic wellbeing’ as being more reflective of what they were trying to express.

Table 5.9: ‘Difficulty answering/expressing’ comments given by participants in terms of spiritual wellbeing

Participant response	Reflective of...	Insight
<i>“That’s a bit of a tricky question” (Participant 18) “I’m not sure what to say...what are you asking me?” (Participant 19)</i>	Confusion	Participants showed confusion over the whole concept of spiritual wellbeing.
<i>“isn’t it?” (Participant 10)</i> <i>“I feel like I’m being tested” (Participant 13)</i> <i>“I think you disagree with me there don’t you?... you think” (Participant 3)</i>	Reassurance	Participant worried that they weren’t getting the answer “right”, and asked lots of counter questions back to interviewer for reassurance that they were “getting it right”.
<i>“Sometimes I think...” (Participant 4)</i> <i>“For some people... for me” “it’s probably aspects of...” (Participant 6)</i>	Non-committal	Some participants were clear about not wanting to be representative of anyone’s views but their own and seemed afraid of giving a definitive answer.
<i>“Oh Crikey!” (Participant 3)</i>	Fear	Some participants showed a real fear of the topic by nervously laughing or showing anxiety over their answer.
<i>“Sorry I am not doing this very well” (Participant 6)</i> <i>“That sounds completely bonkers” (Participant 10)</i>	Embarrassment	Participants felt they should be able to provide an answer and were embarrassed when they couldn’t. Some participants also felt embarrassment at the emotional language.
<i>“That’s a very deep question for a Tuesday night” (Participant 13)</i>	Consideration	Consideration that things such as these should be discussed at a less mundane time.
<i>“I’m trying to be honest” (Participant 10)</i>	Need to be genuine	Some participants felt a real need to be honest and genuine in their answers and not just say what they think is the “right answer”.

5.6 Limitations of Phase Two

This section outlines and discusses some of the limitations to the study identified in Phase Two. These limitations considered here include the demographic data collection tools and the sampling approach utilised.

Overall the demographic data regarding faith was less useful than was anticipated and this was primarily due to the data being collected in poorly-defined categories. When asked whether they considered themselves to be spiritual or religious, participants stated a wide range of spiritual and faith affiliations. For example, there were a large proportion of participants who classed themselves as 'Other' and their answers were then difficult to categorise. Due to the diversity in the answers and the small number of participants, these data offer no clear links between participants' faith and their gardening experiences. In addition to this, many religious participants were reticent to define themselves as solely religious indicating that there are a wide range of connotations and identity issues related with identifying with a specific faith or belief system. This outcome did offer useful lessons in terms of data collection, indicating that defining one's faith is complex and collecting even simple demographic data in this field requires a great deal of consideration.

The sampling approach was both beneficial and restrictive to the project. The approach was beneficial as it allowed for quick and easy access to willing participants, thus increasing the response rate, whilst making good use of limited time and resources. However, the approach was also restrictive in the sense that this kind of sampling often offers access to a demographically similar range of participants who perhaps share similar perspectives (Bryman, 2004). This can be the result of social groupings often being based around shared experiences and perspectives, similar locations and demographics. In addition to this, the participants who agree to take part in such studies often reflect a specific personality type, e.g. those that feel comfortable taking part in the research and confident in their own beliefs. There are concerns that this approach can lead to 'an overreliance on accessible elite informants' (Miles &

Huberman, 1994 p.264). As such, this sampling approach restricted access to individuals who are perhaps more insular or who hold alternate views.

5.7 Chapter Summary

The research aim sought to explore how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners. The findings and discussion outlined above identify that interaction with nature through gardening activity could indeed enhance/develop spiritual wellbeing in gardeners. This is supported by participants comments which suggest that gardening offers them an opportunity to develop a relationship with An-Other in this case Nature. Through this relationship gardeners are able to engage with the four key themes of Connection, Contribution, Awareness and Being Self in relation to An-Other, all of which were identified by themselves as being conducive to spiritual wellbeing.

Chapter 6: Discussion and Synthesis

This chapter offers a review of the main findings from both phases of the study, and considers the overarching findings in relation to the literature. The chapter moves on to offer a wider synthesis of the research followed by further examination of the spiritual wellbeing themes in relation to the wider spectrum of wellbeing. The chapter then considers the study in relation to the research aim, summarising the spiritual wellbeing themes and the participants' gardening experiences. The strengths and limitations of the research are then discussed alongside an overview of the practical implications. The chapter concludes with a discussion of possible future research based around this study.

6.1 Study overview

The primary aim of this study was to explore how interaction with nature through gardening may enhance spiritual wellbeing experiences in gardeners.

Research Objectives

1. Understand whether gardeners demonstrate a connection with nature.
2. Investigate meanings of spiritual wellbeing and identify some of its key features.
3. Explore gardeners' understanding and experiences of spiritual wellbeing.
4. Examine whether the features that reflect spiritual wellbeing (as defined by participants and evident in the literature) are present in or developed through gardening.

The collection of the data in two stages allowed each of the research objectives to be addressed in turn. The research design was grounded in the pragmatism paradigm which was implemented through an iterative, phenomenological approach, addressing the research objectives through two research phases.

Phase one explored spiritual wellbeing with nine primarily community gardeners of faith and considered whether gardeners demonstrate a connection to nature. Phase Two further examined the relationship between humans and nature through semi-structured interviews with 25 primarily home gardeners of no specified faith. This phase sought to identify features of spiritual wellbeing and explore whether those features are present in or developed through gardening. The findings from both phase one and two address the research aim and highlight a range of outcomes in relation to gardening and spiritual wellbeing.

6.2 Summary of main findings

6.2.1 Phase One

The findings from phase one highlighted: human-nature relationships; challenges of communal gardening for developing spiritual wellbeing; and differences between spiritual wellbeing and religion.

Gardening offers a human-nature relationship. Gardeners reported that gardening activity offered them a relationship with nature. This relationship was primarily reported indirectly via comments identifying aspects of a relationship in gardening such as a shared endeavour, care and love. The relationship with nature developed via gardening reflected some of the wellbeing benefits evident in human-human relationships, suggesting the potential strength of nature's role in providing a meaningful relationship. In addition, this relationship highlighted the importance of the concept of feedback between parties in the mutual development and support of wellbeing.

Community gardening appears less conducive to developing some aspects of spiritual wellbeing than independent gardening. This was reflected in comments by the participants which identified that, as reflected in the literature (Heintzman, 2000), being alone or in quiet spaces was supportive of the experience of spiritual wellbeing. Participants reported that other people were often a distraction from such contemplation time. Community gardening does however appear supportive of the experience of spiritual wellbeing, through the human-human relationships and sense

of connection developed therein. In these instances, other people provide the meaningful relationship that supports spiritual wellbeing. Contribution was also highlighted as a benefit of community gardening in that participants felt they contributed to their local community by volunteering their time. As this study's aim focuses on interaction with nature these strands were not investigated further. As such, further research may identify additional spiritual wellbeing benefits experienced by community gardeners.

Spiritual wellbeing is not necessarily related to or reflective of religion. Gardeners of faith reflected that whilst their faith was important to them it was not necessary in developing or supporting spiritual wellbeing. Some faith-based gardeners referred to people they knew who did not follow a faith but still expressed themselves spiritually and highlighted that spiritual wellbeing is not necessarily reflected in following a religion. As the word 'spiritual' is often perceived as being linked with religion, this brought into debate the value of using the word 'spiritual' in spiritual wellbeing.

6.2.2 Phase Two

The findings from Phase Two built on those from Phase One, not only in terms of the data collected, but also in terms of lessons learnt and new directions taken. These findings uncovered participant's understandings of spiritual wellbeing, demonstrated how gardening can enhance spiritual wellbeing, and conceptualised how spiritual wellbeing can be supported when nature is viewed as 'An-Other'.

Identifying features of spiritual wellbeing as defined by participants. Analysis of interviews identified four key themes regarding spiritual wellbeing: Connection, Contribution, Awareness and Being Self in relation to An-Other. In addition, as participants discussed their understanding of spiritual wellbeing in more detail, they made reference to numerous experiences, encounters and emotions. These experiences helped to widen the conceptualisation of spiritual wellbeing and also highlighted the difficulties of using the term spiritual.

Identifying that spiritual wellbeing could be present in *and* developed through gardening experiences. Participants used gardening experiences to express and discuss their concept of spiritual wellbeing. Gardeners reported that spiritual wellbeing could be both present in and developed through their gardening activity. Participants' described gardening experiences that suggested spiritual wellbeing was *present* in gardening activity, such as the expression of care for something other than oneself during the growing process. Alongside this, comments and stories from participants highlighted that spiritual wellbeing could also be *developed* through gardening activity, as it provided a quiet contemplative space in amongst something larger than oneself. Most home gardeners expressed all four identified themes of spiritual wellbeing in their reported gardening experiences (including gardening alone), highlighting that gardening could offer a meaningful relationship with nature through which spiritual wellbeing could be developed.

Recognising how relationship with nature, when perceived as 'An-Other', supports spiritual wellbeing. Participants expressed numerous comments on the relationship between themselves and nature when gardening. These comments demonstrated the importance of the human-nature relationship as a connection through which spiritual wellbeing features could be experienced and spiritual wellbeing could be developed.

It is important to note that many of these findings overlap the phases and are interrelated. For example, both phases highlighted the role of time in experiences of spiritual wellbeing, and the idea of a "human-nature relationship" that helped to build the concept of "An-Other".

6.3 Discussion of study findings

This section draws insight from across the study to consider more widely what spiritual wellbeing is, as conceptualised by the participants, and how gardening develops or supports it based on their experiences.

6.3.1 The role of time in spiritual wellbeing and gardening

Time was highlighted as an important concept related to the development of spiritual wellbeing throughout this study. Time could be both conducive and restrictive to spiritual wellbeing. An excess of time allowed individuals to move beyond the practical activities and elements of gardening to consider the wider, more transcendent perspectives. A lack of time saw individuals focus narrowly on the task at hand which often prevented a deeper consideration of the experience. This is reflected in the literature on spiritual wellbeing and leisure activities in which time is seen as an important factor in supporting spiritual experiences and spiritual wellbeing (Heintzman & Mannell, 2003; Heintzman, 2009). Nature-based activities may help to support spiritual wellbeing, however, by supporting the time element. Being in nature engenders a sense of timelessness, and nature is often experienced as a place in which individuals can lose track of time (Fredrickson & Anderson, 1999; Sharpley & Jepson, 2011). As such, nature-based activities may be supportive of developing spiritual wellbeing in a way that time-restrictive and highly focused activities are not.

Gardening as a nature-based activity offers a unique opportunity in terms of time. Ultimately the amount of time spent gardening and its perception as a rushed or leisurely activity depends on the individual. However, gardening is also primarily a cumulative activity that requires a little and often approach, often consisting of daily actions and routines (Bhatti et al., 2009, 2014). As such, gardening is not an activity that is enhanced by speed and it is rarely an activity that is completed quickly. Taking care of a garden and developing it into one's own space is an ongoing task and one that is often part of an individual lifespan (Gross & Lane, 2007; Freeman et al., 2012). In addition to this, the partnership undertaken in the growing process sees gardeners working on a nature-based time scale.

Gardening in community spaces is perhaps less conducive to enhancing spiritual wellbeing as it has a time-restrictive element. Activities are allocated to specific time restricted sessions and access to the garden may not be permissible outside of these times. Consequently, time is very much part of the focus and as such it may be difficult

to let attention wander in these gardening settings. The growing of food is often a priority for community gardens and this sense of production also ensures that the focus is on the shorter timeframe of a growing season. Independent home gardening is perhaps more beneficial to supporting spiritual wellbeing as it allows for an experience which is less constrained by time, in which the garden is part of one's lifespan.

The role of time in spiritual wellbeing appears to be an important aspect that supports transcendent moments and allows an individual's focus to move beyond oneself to consider wider perspectives. Nature-based activity seems particularly supportive of this, as being in nature focuses the attention on natural processes and landscapes that may ultimately reflect lengthy timespans e.g. the growth of a forest or the progression of a glacier (Fredrickson & Anderson, 1999). Such landscapes may also engender a sense of awe and contemplation which can also be understood as expanding one's perception of time, and deemed beneficial in engendering spiritual wellbeing (Rudd et al., 2012; McDonald & Schreyer, 1991). Gardening as a partnership activity based in nature is closely linked to the role of time as it contains not only a sense of awe and contemplation of the growing process (Francis & Hester, 1990; Kiesling & Manning 2010) but also requires individuals to work on 'nature's time' and as such engenders a slower pace. Consequently the perception of time in the garden and the imposed slower "nature time" under which one works can all be seen as conducive to developing spiritual wellbeing.

6.3.2 The role of faith, religion and transcendence in spiritual wellbeing

In the primary phases of the study, many assumptions were identified in the literature regarding spiritual wellbeing that influenced how the data were collected. One such assumption was that Religion and Transcendent/Otherness moments were key factors affecting the experience of spiritual wellbeing. The Phase One findings suggested however that religion and transcendence actually play a relatively small part in the conceptualisation of spiritual wellbeing.

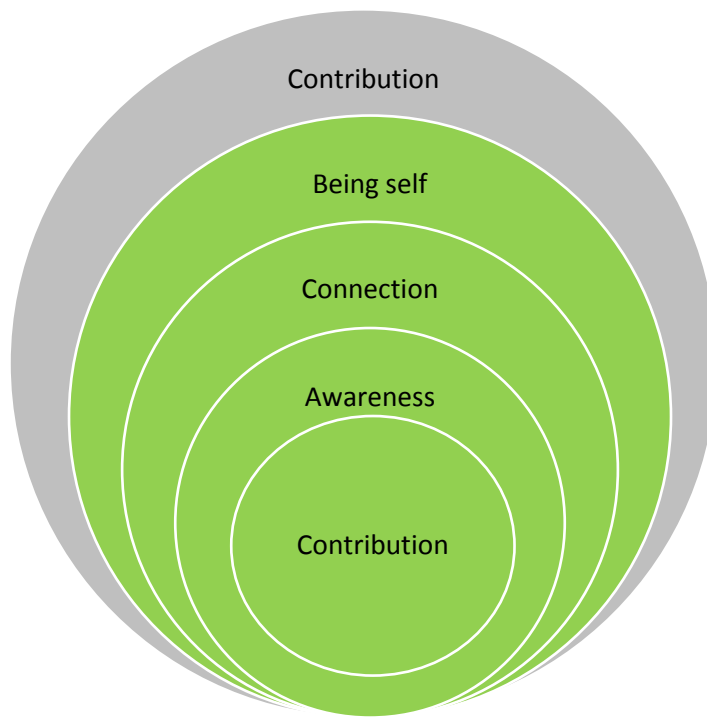
Participants' comments highlighted that spiritual wellbeing in the context of gardening was understood more in terms of everyday moments, as opposed to one-off peak

experiences. In terms of transcendent moments, although participants were able to recount instances of such moments, they found them difficult to create, recreate, harness or define. Individual home gardeners described some instances of transcendence, but community gardeners in particular reported very few transcendent moments. Comments from participants suggest that this is due to the fact that transcendent moments are often linked to quiet settings and solitude, both of which are rare in community garden settings. Community gardeners did report experiences which reflect some of the spiritual wellbeing themes identified in Phase Two, thus indicating that spiritual wellbeing is not solely reflected in transcendent moments. In this study, spiritual wellbeing (whilst containing elements of transcendence) was actually expressed through the experience and accumulation of moments. Analysis of participants comments suggest that momentary or cumulative experiences related to the identified themes of Contribution, Connection, Awareness and Being Self helped to develop their spiritual wellbeing. Such moments of spiritual wellbeing appear to be primarily encountered and expressed through meaningful relationships. For the gardeners that participated in this study, both other people and nature itself provide the components to develop a meaningful relationship in which such moments can occur.

6.3.3 The role of contribution in spiritual wellbeing

The data analysis suggests that in relation to gardening, Contribution appears to be both an outcome and process by which spiritual wellbeing is developed for gardeners. Participant comments and experiences suggest that Contribution offers the process through which all the other themes may be expressed. For example, an awareness of the detail of the growing process, a sense of self-expression through creativity and a connection to nature via the growing partnership was not expressed without the process of Contribution. Figure 6.1 illustrates these linkages by placing contribution as both the core element and all-encompassing process that links the themes together.

Figure 6.1: The linkages between the spiritual wellbeing themes as expressed in relationship to An-Other.



Contribution is a linking theme not only in the form of providing an underlying process, but also through its ability to combine and link themes. For example, some form of Contribution combined with a sense of heightened Awareness allows for a Connection to be developed between oneself and An-Other. This Connection could reaffirm or bring into question an individual's sense of self in amongst this greater picture and a reconsideration of the identity they hold and role they play. This affirmation of identity through a sense of Being Self, alongside an increased sense of Connection and Awareness may also make Contribution more likely, thus suggesting a self-perpetuating cycle between the themes. Consequently it would appear that it is the integration of these themes working together to develop and strengthen the relationship between the self and An-Other that help to support spiritual wellbeing (Figure 6.1)

6.4 Synthesis of study findings

6.4.1 Defining spiritual wellbeing

The working definitions used in this study were outlined in Table 2.4 and proved useful in helping to outline the separate concepts of spiritual and wellbeing.

This study proposes a new definition of spiritual wellbeing developed from the findings of this project (Table 6.0). This definition is based upon the interpretations of each term as outlined in the original working definitions of “spiritual” and “wellbeing” and the data collected from participants.

Table 6.0: A new definition of spiritual wellbeing

Spiritual wellbeing	An elemental and integrative part of the process of wellbeing, in which a meaningful relationship with An-Other develops awareness of, sense of self within, and feelings of connection and contribution to something greater than one’s self.
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The definition of spiritual wellbeing provided here is an attempt to bring together both the literature and the findings from this study. It reflects the focus on meaningful relationships as highlighted in the literature and the themes as present within participants’ comments. The definition also attempts to reflect the elemental and holistic perception of spiritual wellbeing.

The findings suggest that the concept of spiritual wellbeing and its place in the wellbeing spectrum is one that is clearly recognisable even if not fully understood. However, many participants felt that this concept was poorly represented by the term spiritual wellbeing. The concept as outlined by some participants offers a wider scope and holistic perspective and as such ‘spiritual’ was rarely used as a word to express their understanding. Due to its links to religion, ‘spiritual’ was perceived by many participants as a narrowly-focused, loaded term that they were unable to relate to.

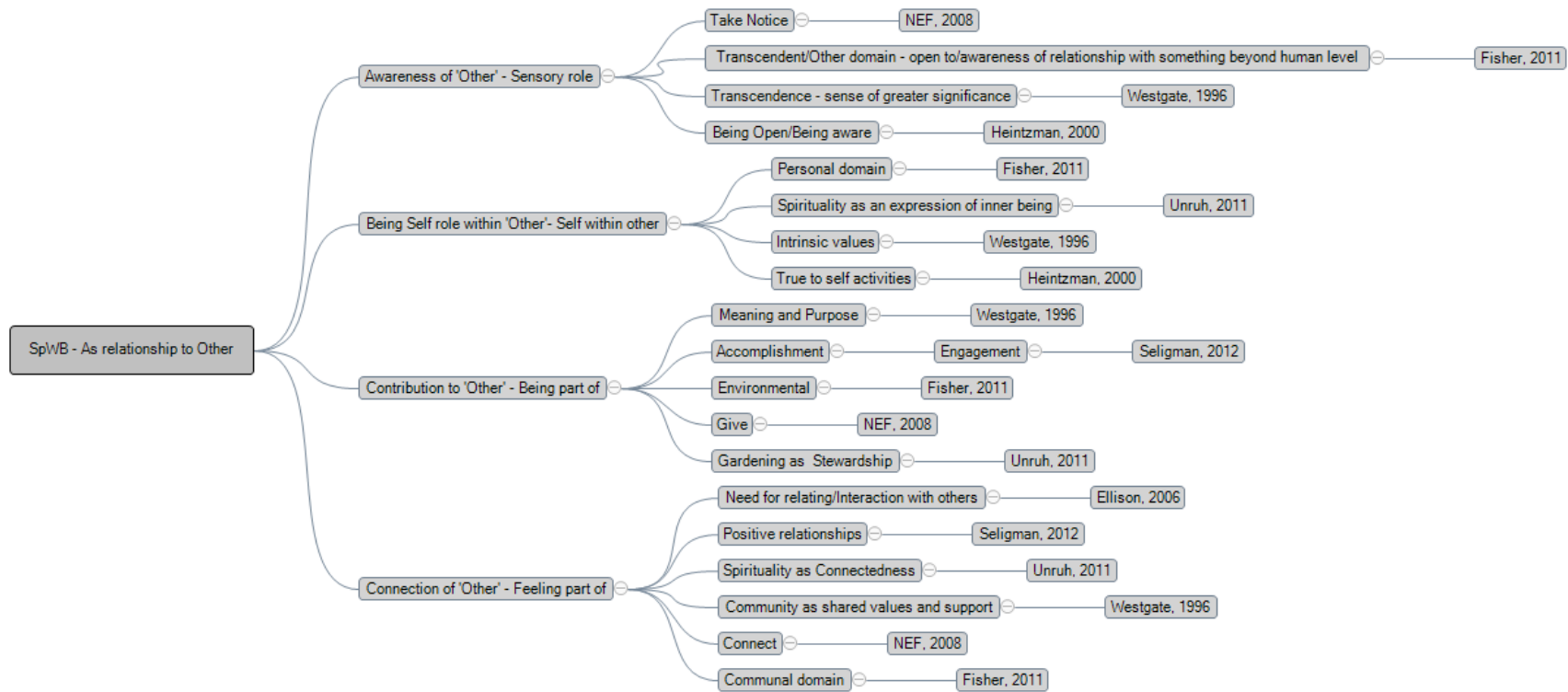
This issue was also identified in the Phase One study, where many gardeners of faith reported that spiritual wellbeing was not necessarily linked to their religion, but reflected a much wider concept. As such, it is important to note that the word spiritual

as used here should not be assumed to necessarily be related to religion or religiosity. Some participants suggested a change in terminology suggesting terms such as the 'human spirit' to reflect this dimension of wellbeing. This was not adopted into the new definition however, as the data was collected specifically in relation to the term spiritual wellbeing. Consequently, this definition offers the beginning of a new understanding of spiritual wellbeing but still does not provide a complete picture. Further research would prove beneficial in developing terms and phrases that could prove effective in accurately expressing the notion of spiritual wellbeing in a variety of settings outside of academia to appeal to both political and public audiences.

6.4.2 The conceptualisation of spiritual wellbeing

The four emergent themes – Connection, Contribution, Awareness and Being Self - are reflective of the literature on spiritual wellbeing within several fields of study (Fisher, 2011; Westgate, 1996; Heintzman, 2000; Unruh & Hutchinson, 2011) and more widely in a number of general wellbeing models particularly the PERMA model (Seligman, 2004) and NEF's five ways to wellbeing (2008). Figure 6.2 shows how aspects of the themes are reflected in both the academic and policy-based literature.

Figure 6.2: The themes of Connection, Contribution, Awareness and Being Self as reflected in the literature



In terms of the academic literature, Fisher's work around spiritual health perhaps offers the greatest support for the findings by highlighting the importance of relationships. Fisher states that 'Spiritual health is...reflected in the quality of relationships that people have' and goes on to highlight four domains of spiritual well-being (2011 p.17). These domains are very similar to those identified by the participants in this study. For example, the Personal and Communal domains highlighted by Fisher are similar to 'Being Self' and 'Connection' in this study, whilst the domains of Environmental and Transcendental are also aligned with Contribution and Awareness.

It should be noted that whilst the Transcendent domain is recognised as linked to the Awareness theme, it was talked about less explicitly by participants in this study. Fisher outlines the Transcendental domain as dealing with, 'the relationship of self with some-thing or some-one beyond the human level' (Fisher, 2011 p. 1976). Therefore it is linked in Figure 6.2 to the Awareness theme as participants expressed an awareness of this sense of relationship, but rarely referred to it as an experience of transcendence. It is also reflective of the theme of Connection as discussed in this study as it highlights the role of relationships. The Environmental and Transcendental domains may also be overarching as they appear to highlight both connecting with nature and relating to something beyond the human level, and thus form the basis for the underlying relationship with An-Other.

Westgate's work around spiritual wellness highlights four areas that are reflected in the understanding of spiritual wellbeing given by participants. The four areas include 'a sense of meaning in life, a transcendent perspective, an intrinsic value system, and a sense of belonging to a spiritual community of shared values and support' (Westgate, 1996 p.26). These four domains could be seen to be reflected to some degree in the themes of Contribution, Awareness, Being Self and Connection respectively, although as outlined above, the transcendent perspective was not explicitly discussed by most participants and reflected more of a general awareness.

Ellison's work, whilst focused on overall wellbeing, also picks up on the need for relationships echoed through the theme of Connection. Connection appears to be the most commonly reflected theme from this study in the literature surrounding spiritual wellbeing. However, the findings from this study do not necessarily suggest that Connection is the primary theme in developing spiritual wellbeing. Whilst this study highlights Connection as a key theme, the role of Contribution appears to have the greatest impact on spiritual wellbeing, as both a way of developing wellbeing in and of itself and a way of supporting the other themes.

The four themes developed through participants' comments reflect mainstream policy and practice in the field. NEF's five ways to wellbeing model (NEF, 2014) promotes the evidence-based actions of giving, learning, being active, connecting and noticing as being supportive of individual wellbeing. These actions are clearly reflected in most of the spiritual wellbeing themes developed in this study. Only 'keep learning' and 'be active' were not explicitly referred to by participants in relation to spiritual wellbeing, but these are features that were expressed in their gardening experiences suggesting that gardening could help to support a holistic model of wellbeing. The overlap between NEF's five ways to wellbeing and the findings from this study are explored in more depth in section 6.4.3.

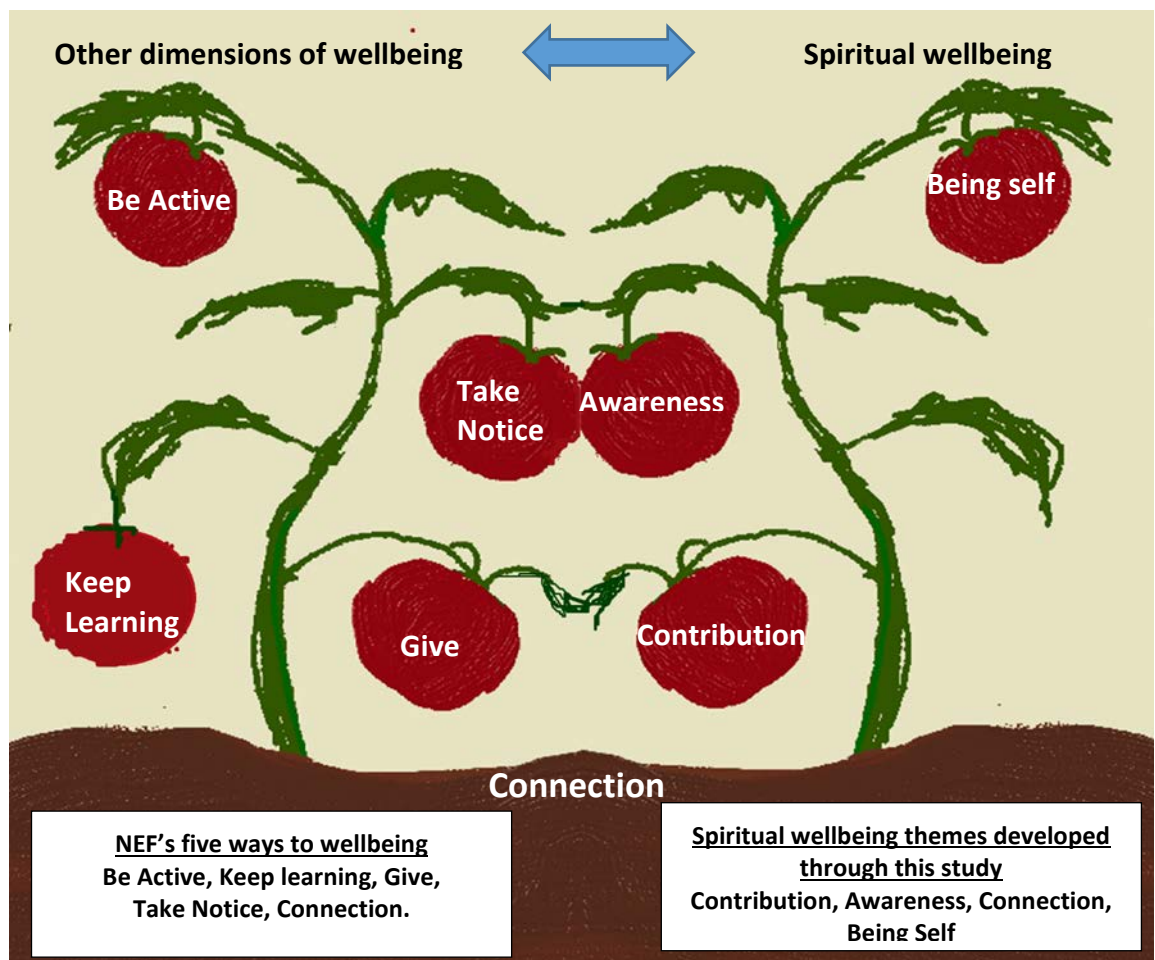
Overall, the mapping process of comparing the four key themes against literature and policy in the field helps to identify the similarities highlighted by participants between the wellbeing benefits of human relationships and human-nature relationships.

6.4.3 Parallels between the spiritual wellbeing themes and NEF's Five Ways to Wellbeing model

The research findings highlight some overlap between the spiritual wellbeing themes identified in this study and more general wellbeing themes reflected in NEF's five ways to wellbeing model (2008). Contribution is reflected in the 'Give' domain, this identifies the role of 'being self' as an important part of wellbeing. This is rarely raised independently in wellbeing models, rather it is often seen as a subsidiary effect of wellbeing. 'Being self' in relation to spiritual wellbeing is highlighted as an important

aspect in personal perception and development. Being self in relation to An- Other, reflects the feedback aspects of wellbeing and an increased awareness of one's place in wider concerns. The two additional themes highlighted by NEF in overall wellbeing that were not directly featured in participants' views of spiritual wellbeing were 'keep learning' and 'be active'. These are inherent in gardening activity but do not appear to be linked to spiritual wellbeing. Be active is addressed in the physical wellbeing domain of gardening, whilst keep learning was reflected in the mental wellbeing domain, as many gardeners reported a learning process behind gardening activity. These additional aspects are also supportive of the holistic nature of gardening, highlighting how it addresses a range of physical, mental, social and spiritual wellbeing benefits.

Figure 6.3: A visual representation of the spiritual wellbeing themes and NEF's five ways



The central section of Figure 6.3 reflects the merging of the NEF and study themes, with clear overlaps being evident in both phraseology and content. For example, take notice encourages not only an awareness of the world around you but also of your feelings. A similar sentiment is reflected in the theme of awareness as conceptualised by participants this study, in which they discuss an awareness of things beyond the self. Give and Contribute are also conceptualised in very similar ways, with NEF identifying the benefits of contributing as having a feedback element. This sentiment was also expressed by participants in this study in which the role of contribution was seen to be quite extensive in terms of developing spiritual wellbeing.

Connection (*Connect*) is the only theme to utilise the same phrasing and reflects almost identical features such as connection with others. Despite these similarities the NEF conceptualisation does not include nature as a potential other. This is reflective of many overall wellbeing models (Seligman, 2012; ONS, 2015; Henriques et al., 2014) in which nature's potential role as An-Other to which one can connect as highlighted by participants in this study is currently not recognised. On the far right the emergent theme of being self is the only theme not reflected in the NEF model

The two-way arrow at the top of the diagram reflects the entwined aspects of the wellbeing dimensions. The arrow demonstrates that general wellbeing themes such as those identified by NEF are also evident in spiritual wellbeing conceptualisations. It is important to note that NEF's understanding reflects ways to wellbeing and as such can be seen as processes through which wellbeing can be developed. The themes in this study are also outlined as processes through which spiritual wellbeing could be developed. Although this study could suggest that developing meaningful relationships would support spiritual wellbeing, the themes themselves require further research and refinement to develop them into evidenced based actions that one can incorporate into their daily life.

6.4.4 Differences between the findings and the literature.

This section explores the differences between the findings from this study and the literature in the field of spiritual wellbeing.

The importance of a meaningful relationship with An-Other in which the spiritual wellbeing themes can be developed and expressed was highlighted by the participants. However, additional remarks were made particularly through the stories given by participants that are not reflected explicitly in spiritual wellbeing literature. Participants talked about the importance of a shared history, a significant setting and a sense of openness as all being conducive to building a meaningful relationship with An-Other that could support spiritual wellbeing. Whilst much of the literature highlights the aspects of life that support spiritual wellbeing, the participants in this study highlight the relationship with nature as a place in which those aspects can come together. The relationship with nature as expressed through gardening offers a shared history through the accumulation of growing seasons and a significant setting through the role of the garden and gardening activity throughout one's life. Participants also expressed that a relationship with nature required a sense of openness in which one recognised the larger forces at work and these were thought to be particularly apparent in gardening activity.

Westgate (1996) highlights a sense of shared intrinsic values or spiritual community as important for the development of spiritual wellbeing. At first glance, this would appear to not be apparent in the participants' responses. However, when we begin to think about nature as An-Other, i.e. both part of and separate from oneself, we begin to see some commonalities. Nature is perceived by participants as offering a sense of community through the natural world in which the participants engage. For example, being part of the daily routines of local wildlife (e.g. through feeding) highlights to participants that they are part of an ongoing natural community. This sense of community was extended by some participants who identified a sense of relatedness to nature that suggested a level of anthropomorphism towards the natural environment. Anthropomorphism has been discussed as reflecting the wellbeing benefits of connectedness to a social group in other human-nature studies (Tam et al., 2013). This suggests that the spiritual benefits from being part of a community that may be experienced through feeling a sense of belonging and support (Westgate, 1996), may also be experienced in human-nature relationships. These aspects may also

be identified in the principles of Biophilia (Wilson, 1984) in which we innately wish to engage with nature and as such have a shared interest in its survival and preservation.

6.4.5 Spiritual wellbeing as process and outcome

Spiritual wellbeing as conceptualised by participants, consisted of two key strands. They are the *outcomes* or signifying features of spiritual wellbeing and the *processes* or ways in which the signifying features can be supported in daily life. This two strand approach is expressed in the literature and can also be seen in all forms of wellbeing. For example, in the case of physical wellbeing, a healthy weight and good level of fitness may be signifying features, but the processes by which these can be achieved, i.e. a healthy diet and exercise are equally important to the conceptualisation of physical wellbeing.

Exploring the findings in light of this two strand approach, analysis of participant responses identified that characteristic outcomes and processes in terms of spiritual wellbeing include the key themes of Contribution, Connection, Awareness and Being Self. For example, Contribution was identified as both an outcome and process by which spiritual wellbeing could be developed. Contribution could emerge as an *outcome* based on an increased sense of Awareness or Connection to something other than oneself; for example a sense of connection to the local gardening community or awareness of the garden space. Also, Contribution to a meaningful relationship with An-Other, such as volunteering at a community garden, offers a *process* through which the features of Connection, Awareness and Being Self can be expressed and developed, thus supporting spiritual wellbeing. Whilst all the themes reflect the two strands of outcome and process to some extent, it is most clearly outlined in terms of Contribution in this study.

Whilst the perception of wellbeing as both a process and an outcome is supported in the literature (ESRC, 2007), it is often identified as an achievable state (Oxford English Dictionary, 2016; Whitehall Working group UK, 2006). Initially the data collected in this study was based around that premise and conceptualised spiritual wellbeing as an outcome, with participants being asked to identify moments of spiritual wellbeing and

how these moments can be increased. However, the findings suggest that spiritual wellbeing is also a process involving multiple features that can be developed and enhanced throughout the lifespan.

The understanding of spiritual wellbeing as a process also supports the notion raised in this research of a sliding scale of spiritual wellbeing (see Figure 5.8, Chapter 5).

Through this sliding scale, the spiritual wellbeing themes identified in gardening activity could be expressed at various levels and in different combinations. An important aspect of this approach is that the four themes themselves are interrelated with none of them working in isolation. The themes can be expressed in any order or frequency and are strengthened and supported by each other, with individuals viewed as being able to develop spiritual wellbeing from their own starting point. Spiritual wellbeing is thus identified as an integrated process in which multiple dimensions work together at different levels.

Spiritual wellbeing as an integrated process is also identified more widely in the sense that spiritual wellbeing itself is supported through its integration with physical, mental and social wellbeing. The findings in this study are supportive of the view outlined in the literature review that spiritual wellbeing is both part and parcel of wellbeing, representing not only one dimension of wellbeing, but also aspects of wellbeing as a whole. Whilst spiritual wellbeing contains elements not represented elsewhere in the wellbeing spectrum, such as a relationship with something other than oneself, spiritual wellbeing is also apparent as a combination of physical, mental and social wellbeing. This integrated nature of spiritual wellbeing suggests that it might be difficult to experience spiritual wellbeing at its peak in isolation from the other wellbeing dimensions. This study highlights that spiritual wellbeing, when supported by physical, mental and social wellbeing, can reflect a sense of wholeness. As highlighted previously, this study considers spiritual wellbeing as both an elemental aspect of wellbeing and also a form of holistic wellbeing and representative of a culmination of wellbeing dimensions. As such spiritual wellbeing is identified through the themes outlined in this study, but also by these themes combined with physical, mental and

social wellbeing. This sense of wholeness that spiritual wellbeing appears to reflect is not currently expressed well by the term spiritual wellbeing.

6.4.6 Feedback element of spiritual wellbeing

The findings suggest that spiritual wellbeing is a relationship between the self and An-Other, and, as such, is a concept that is holistic and extends beyond the self. The role of An-Other adds a social component to spiritual wellbeing that suggests it may also be developed and supported by enhancing the wellbeing of others, and thus contains a feedback element. This feedback element is evident in human relationships, when being around others who are thriving and supporting others who are not, may be beneficial for the wellbeing of individuals (NHS, 2016). In terms of human-human relationships this idea is also partially reflected in the 'Give' aspect of NEF's five ways model (2008), highlighting that helping others develops individual wellbeing.

Participants in this study identified that in terms of the human-nature relationship, spiritual wellbeing can be enhanced through the feedback received from the natural environment. For example, many participants expressed an increase in their happiness when they had managed to support a plant to grow, or a decrease in their happiness when the garden appeared neglected. This suggests that spiritual wellbeing is reflected not only in one's own wellbeing, but in the wellbeing of those around you, including the natural environment. This sense of feedback points to a beneficial symbiosis between humans and nature that contributes to the enhancement of both parties (Francis & Hester, 1990; Bhatti et al., 2009).

The feedback element of spiritual wellbeing highlighted within this study may imply that the relationship aspect of spiritual wellbeing is multi-functional and serves to not only enhance spiritual wellbeing but to also act as a driver in improving the wellbeing of others. Viewing spiritual wellbeing in this way helps to address how wellbeing itself is conceptualised. One issue, the conceptualisation of wellbeing faces is that it is essentially a value-laden construct that reflects both individual and researcher's interpretation of wellbeing (Henriques et al., 2014). For example, an individual could experience all of the themes related to spiritual wellbeing as outlined in this study, but

express them through anti-social behaviour, e.g. inner-city gangs. In this instance a sense of belonging to a group or contribution to a cause may not be seen as a positive aspect and as such they would probably not be deemed to have high levels of wellbeing by the majority of the population. However, when we take into account the wellbeing of others via the feedback aspect outlined as part of the relationship process in this study, wellbeing becomes a slightly less value laden concept.

In summary, spiritual wellbeing has proved difficult to both define and conceptualise. It has been suggested that spiritual wellbeing as a phrase adds some confusion to the understanding and conceptualisation of what it actually consists of. Additionally, spiritual wellbeing has been identified by participants as both a process and an outcome and appears to contain a feedback element.

6.5 How spiritual wellbeing may be developed/enhanced by gardening.

This section consolidates the overall findings and the literature from the study to address the research aim.

Spiritual wellbeing appears to primarily be enhanced by gardening through the development of a meaningful relationship that allows the features of spiritual wellbeing to be expressed. As such, gardening may develop spiritual wellbeing through both the human relationship experienced in community gardening and the human-nature relationship experienced by home gardeners.

Human relationships are often described as key factors in enhancing overall wellbeing, with 'active social participation' being reported to reduce the risk of mental health disorders (NEF, 2012a), whilst social connections are considered to be among 'the most robust correlates' of subjective wellbeing (ONS, 2015b). Given this, the Office for National Statistics (ONS) promotes the importance of social relationships reporting that 'The frequency of contact with others and the quality of personal relationships are crucial determinants of people's well-being' (Kahneman & Krueger, 2006 as cited in ONS, 2015a p.2). Human relationships are viewed as supporting a sense of connection and also reducing isolation and loneliness (NEF, 2012b). The NHS in the UK advises that

connection with others is beneficial for wellbeing, reporting that relationships support wellbeing through building a sense of belonging and self-worth (NHS, 2016). As such human relationships play an important role in developing and supporting wellbeing.

Community gardening develops a sense of spiritual wellbeing as it promotes Connection and a sense of Contribution. Community gardening takes place amongst and develops social relationships, thus encouraging social participation. As a pro-social encounter, community gardening may help form a sense of Connection to others through weekly or daily encounters. This regular interaction with others is likely to support broader wellbeing outcomes, such as reducing isolation and loneliness. In terms of Contribution, community gardening involves the sense of joint endeavour. Community gardening requires individuals to commit time and effort, but offers tangible benefits through the growing of produce, learning new skills or aesthetically improving an outdoor space. Involvement in a shared enterprise requires individuals to work together thus engendering a sense of shared identity. In support of overall wellbeing, engagement in a shared endeavour such as community gardening may help to develop a sense of belonging and self-worth. In terms of spiritual wellbeing community gardening supports both the Connection and Contribution strands as highlighted in this study.

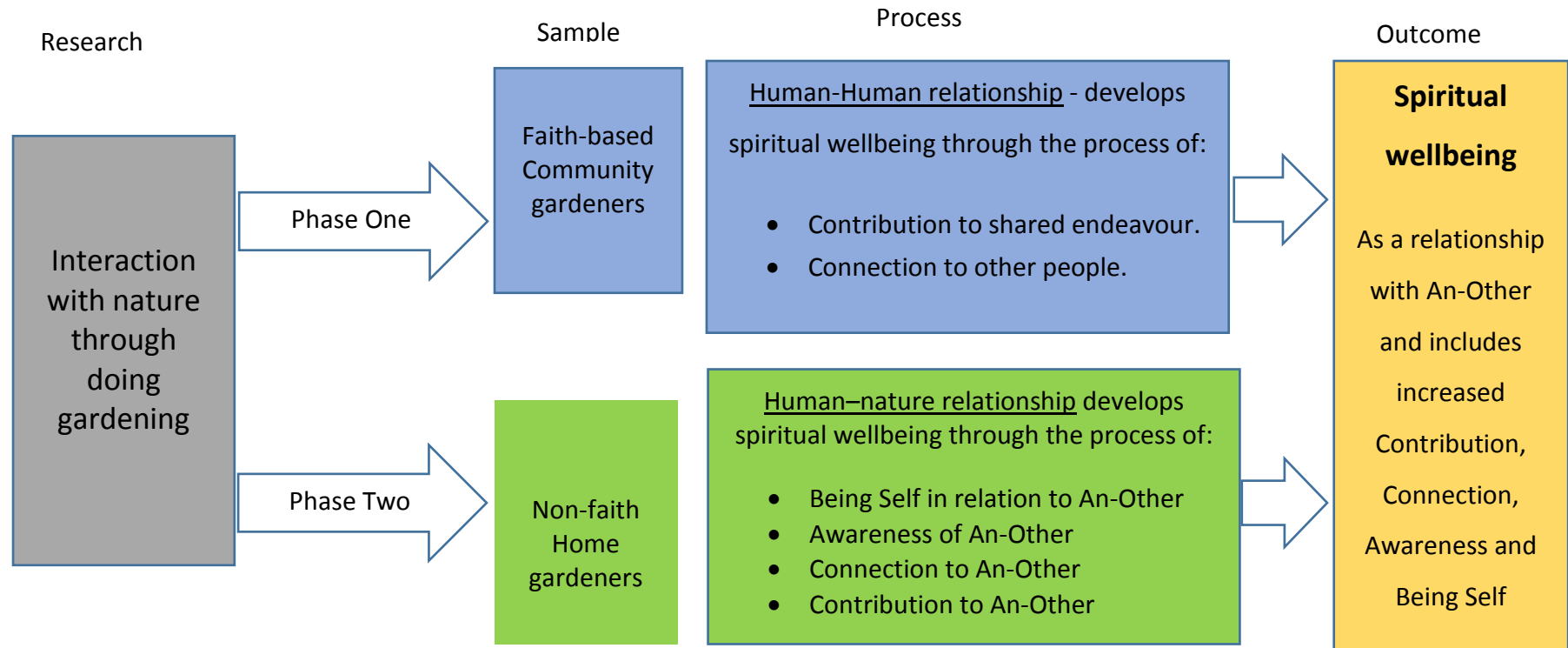
Human relationships are not the only form of meaningful relationship supportive of wellbeing; for example the human-pet relationship has been shown to have multiple wellbeing benefits including providing an important source of social support (McConnell et al., 2011). This study focused on one of these alternatives, specifically the human-nature relationship. This relationship is particularly evident in gardening as it offers an example of a meaningful relationship between human and An-Other. In this relationship, nature is perceived as the other party and many of the beneficial aspects of human relationships are mirrored. For example, in human relationships a sense of connectedness is considered an important aspect of a meaningful relationship.

The concept of '*intimate, relational and collective connectedness*' (Cacioppo, 2014 para 8) highlights several distinct ways in which connection can support wellbeing.

Intimate connectedness is reflected in relationships that help to reaffirm who you are; relational connectedness is developed through positive face-to-face encounters; and collective connectedness is supported through feeling part of a group or something bigger than oneself (Bergland, 2014). These features of connectedness are also reflected in the spiritual wellbeing themes outlined in this study and evident in gardening activity. Community gardens appear to develop relational and collective connectedness through increasing face-to-face encounters in a community setting, as highlighted by a sense of Connection and Contribution. Intimate, relational and collective connectedness are apparent in the experiences of home gardeners for whom a deep relationship with nature was identified through the themes of Being Self, Connection and Contribution. Thus it is apparent that the human-nature relationship also offers many of the key beneficial features identified in human-human relationships.

The differing spiritual wellbeing benefits experienced in various gardening settings is highlighted in the conceptual model (Figure 6.4). This model addresses the research aim by bringing together the findings to highlight the ways in which community garden settings and home gardens may support spiritual wellbeing.

Figure 6.4: Summary Conceptual Model



This study suggests that the relationship developed during gardening goes beyond the partnership that gardeners experience when taking part in the growing process. Traditional perceptions of gardening view it as a practical leisure activity focused around an end goal, but these fail to acknowledge the developing and deepening relationship that can develop between humans and nature over a lifespan. Whilst this sense of practical partnership could be a part of the relationship between humans and nature it is not the only or key feature and does not reflect the deeper relationship reported by some participants. The human-nature relationship experienced when gardening, reflects a connection that moves beyond working colleagues to life partners. The relationship is reflected in numerous ways: from the shared history of the space, the consideration and care for plants and the support the gardener and garden offer each other in times of crisis.

However, human relationships are rarely perfect and often contain negative elements; the human-nature relationship appears to be no different in this sense. Stress and pressure were amongst just some of the negative emotions expressed around some gardening activities; such issues are reflected in human relationships (Umberson & Montez, 2010) in which conflict or caring for another can have a negative effect on wellbeing and health. The human-nature relationship reflects many of the benefits and problems reported in human relationships such as support and connection, conflict and stress. However, the fact that the relationship contains these negative elements emphasises that it is a meaningful relationship that faces the same challenges as others.

This concept of a human-nature relationship can be seen throughout history. It is discussed in the contemporary academic fields of ecopsychology (Roszak et al., 1995), its sentiment underlies the theories of biophilia (Kellert & Wilson, 1995) and it is the bedrock of some belief systems such as paganism and nature spirituality (York, 2015; Taylor, 2010). However, this study indicates that even individuals who do not identify with these groups still highlight the benefits of the human-nature relationship. Undertaken with healthy individuals, the research outlines wellbeing themes that are

evident in this relationship and highlights their importance through the lifecycle. Thus this relationship might not only build resiliency and provide support in times of crisis (Kaplan & Kaplan, 1989), but also offer life enhancement and enjoyment throughout the entire life span. Consequently, findings from this study provide support for the idea that a relationship with nature can be beneficial for spiritual wellbeing even when one is not unwell and even when one is not affiliated with a particular faith or religion.

6.6 Implications, Limitations and Future Directions

This section outlines the original contributions to knowledge that this study provides and discusses the applicability of some of the wider outcomes to the fields of wellbeing and nature interaction. The section proposes a range of theoretical, policy-based and practical implications arising from this study. The section concludes by considering the limitations of the research and potential direction for future studies.

6.6.1 Original Contributions to Knowledge

Theoretical contribution to knowledge

The study provides a theoretical contribution to knowledge by developing an original conceptualisation and definition of spiritual wellbeing. This novel definition recognises spiritual wellbeing as an elemental and integrative dimension of overall wellbeing supported by meaningful relationships. This broader understanding enables spiritual wellbeing to be understood and identified in a range of settings and interactions including in terms of the human-nature relationship. The findings also highlight spiritual wellbeing as an interrelated dimension of wellbeing, identifying the ways in which experiences of spiritual wellbeing overlap with and are influenced by other wellbeing dimensions.

Empirical contributions to knowledge

The research offers an empirical contribution to knowledge through the in-depth analysis of data surrounding the spiritual wellbeing benefits of the human-nature relationship. Whilst current wellbeing literature identifies the importance of human relationships, this study extends the idea of 'relationship' beyond human to human. The study identifies the role that the human-nature relationship can play in

contributing to wellbeing, highlighting a range of features that mirror those found in human relationships. A sense of contribution, connection, awareness and being oneself in relation to An-Other are already considered as beneficial to wellbeing in human relationships and are evident in human-nature relationships. As such the human-nature relationship can be seen to be an important although often neglected source of wellbeing. The recognition of the importance of this relationship in terms of wellbeing models contributes original insight in this field.

Methodological contributions to knowledge

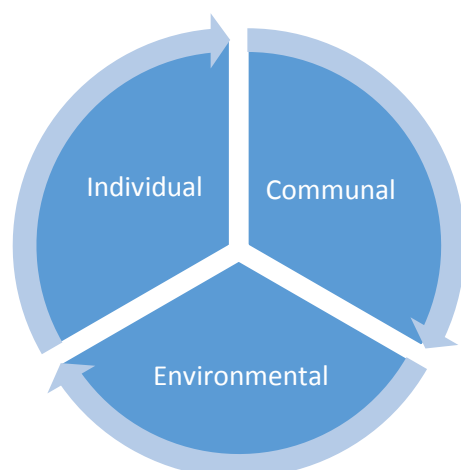
This study was methodologically original by focusing on healthy participants, as opposed to participants facing life crises or experiencing ill health. As such the findings from this study offer a unique perspective on spiritual wellbeing, moving it beyond a prescriptive measure to be seen instead in positive psychology terms as a matter of ongoing life enhancement.

The analysis undertaken in this study identified both the perceived aspects of spiritual wellbeing and the unnoticed experiences of spiritual wellbeing. By focusing on both participants' answers and their wider experiences (through their recounted stories) this study offers some methodological development in terms of how to better identify and understand spiritual wellbeing experiences.

6.6.2 Practical Implications: Individual, Communal and Environmental benefits

The thesis has focused around individual spiritual wellbeing that could be developed or enhanced through gardening. However the findings suggest that wider benefits may be identified that incorporate the individual, communal and environmental dimensions, thus suggesting that spiritual wellbeing as developed through gardening offers wider benefits beyond those of the individual. This section extends the conceptual model developed throughout this thesis and offers an overview of potential outputs that spiritual wellbeing, when developed through a relationship with nature, offers in terms of individual, communal and environmental benefits. These categories are employed for clarity only and are not seen as mutually exclusive, rather as intrinsically interrelated as highlighted by the cyclical nature of Figure 6.5.

Figure 6.5 The potential wider benefits of increased spiritual wellbeing and gardening activity.



Individual benefits

Individual benefits include: a reduced sense of isolation and loneliness; heightened sense of meaning and purpose; increased self-acceptance; and a sense of perspective. Each of these benefits is directly related to the spiritual wellbeing themes as identified by the participants.

The development of an increased sense of connection to An-Other in everyday life could help to tackle loneliness and isolation through building a sense of community and support. The findings from this study suggest that the development of spiritual wellbeing through gardening helps to develop connections both with nature and with other people. In terms of nature, this sense of community is reflected in the plants and wildlife present and requires a perception of nature in which it is viewed as part of one's social world. This perception may also strengthen over time as a sense of connection to the natural environment becomes more established.

A heightened sense of meaning and purpose in one's life may be supported through the theme of contribution. By contributing to something larger than oneself, through either volunteering at a community allotment or taking an active part in the growing process, some participants reported an increased sense of meaning and purpose in their lives. An increase in meaning and purpose is beneficial for individuals, as low

levels of these have been seen to be associated with higher levels of depression in individuals (Ryff, 1989).

Self-acceptance is thought to be reflective of optimal functioning with a 'positive attitude towards oneself' seen as indicative of 'positive psychological functioning' (Ryff, 1989 p.1071). Increased self-acceptance is therefore beneficial to individuals and can be seen to be supported through the theme of Being Self. This theme encourages self-acceptance through acknowledgment of one's place in relation to An-Other. In addition, the human-nature relationship expressed through gardening was identified by participants as an authentic activity that reflects their true selves. Such 'true to self' activities are thought to be beneficial in allowing for the expression of one's personality, whilst inauthentic activity creates tension and may negate the benefits of spiritual wellbeing (Heintzman, 1999 p.3). Taking part in true-to-self activities, alongside acknowledgement of one's place in amongst something greater, may help to support self-acceptance.

All of the above themes were expressed through, and develop occurrences of, positive emotions. In terms of gardening, the process of growing was seen to be a key aspect that elicited the greatest amount of positive emotions, particularly those of inspiration, gratitude, joy and awe. Increases of positive emotions are seen to be beneficial for individuals as they develop resiliency and broaden their thought action repertoire (Fredrickson, 2001). Positive emotions as experienced through positive social connections have also been seen to be good for overall general health, and as such, experiences which develop and allow for the expression of these hold significant individual benefit (Kok et al., 2016).

Communal benefits

The communal or societal benefits of increased spiritual wellbeing through gardening activity are expressed primarily via the themes of contribution and connection in relation to human relationships.

In terms of communal benefits, the sense of contribution reflected in the experiences of community gardeners can be seen to support community engagement. An increase in this may be beneficial in strengthening social integration. Contributing to a shared endeavour such as a community garden reflects the activity of volunteering. Volunteering is seen to have a wide range of communal benefits with areas that report high levels of volunteering reporting a range of benefits from reduced crime rates to increased educational attainment (Whiteley, 2004).

An increase in contribution to one's community can be seen to develop a sense of connection and shared identity within that community. Community cohesion fostered by this sense of connection is beneficial in strengthening neighbourhood ties and integrating diverse social groups, as identified by the Commission on Integration & Cohesion (England), (2007).

Environmental Benefits

The environmental benefits highlighted in this study are centred on three of the key themes: Connection, Awareness, and Contribution. The theme of connection points to opportunities for individuals to feel an increased sense of care for natural spaces. The human-nature relationship offers a change of perception in which both parties are seen as equal members and as such deserve equal consideration. As contemporary living is often based on the destruction of nature, its protection requires a level of care beyond oneself. The findings in this study suggest that the human-nature relationship as expressed through gardening engenders a level of environmental altruism (Perkins, 2010) and anthropomorphism (Tam et al., 2013) in some participants which may be beneficial for environmental protection. On a macro level, this sense of connection may help to develop a sense of care and protection for communal green spaces (Davis et al., 2009). In contrast, on a micro level this level of care ensures that plants get tended and beneficial species are supported. This increased sense of care may also encourage heightened awareness of environmental issues. For example, many gardeners reported noticing wider changes in the weather patterns and the seasons. This heightened awareness may be directly linked to the theme of contribution, with a

greater awareness of environmental issues perhaps encouraging pro-environmental behaviour (Nisbet et al., 2009).

Whilst the activity of gardening was considered by most participants to reflect a deep relationship with nature, this relationship offers both benefits and detriments to the wider natural world. Consequently, there is a counter perspective to the environmental benefits outlined in this study that must be acknowledged. At a first glance, gardening could be perceived as developing environmental benefits as it is based upon the increased care and attention of a natural space. Despite this, not all gardening is pro-environmental, with many garden practices such as applying pest treatments often damaging to the environment. In addition to this, whilst a personal garden may receive care, alternate natural spaces are not always seen as an individual's responsibility. Consequently, it might be the case that whilst some gardeners demonstrate pro-environmental behaviours, they may not necessarily view alternate natural space with the same degree of care and sense of responsibility as they do with their gardens. In addition to this, the more skilled and competent a gardener was, the greater their engagement in caring for nature. For example, gardeners who felt they had the skills to play a part in the growing process and could help nature, tried to do so, whereas those who expressed a lack of gardening skills expressed apathy towards and a detachment from nature. Consequently, promoting gardening and teaching gardening skills may help to encourage pro-environmental behaviours through providing the knowledge to help address natural issues.

Participants acknowledged that they played a role in the garden and that it was a place where they had some sense of responsibility; as such the theme of connection was felt to be much stronger in the garden than in other natural spaces. Nevertheless this lack of control and responsibility added to the sense of wildness that they felt in natural spaces outside of the garden. Wilder spaces engender feelings of awe and wonder that are seen to support spiritual wellbeing, and are more emotional responses due to the vastness and wildness of the space (Fredrickson & Anderson, 1999). So whilst wilder

spaces help support spiritual wellbeing, it is clearly not through the same process as gardening which is based on longer-term meaningful relationships.

Interrelated Benefits

The individual, communal and environmental potential benefits from this study are closely interrelated. Lower levels of individual depression, isolation and loneliness combined with an increase in sense of perspective, meaning and purpose may help to develop flourishing individuals that contribute to a functioning society (NEF, 2008). The communal benefits of improved access to high quality green spaces, alongside increased numbers of volunteers and sense of community may also improve local neighbourhoods and individual quality of life. Flourishing individuals and functioning societies thus appear to be supported by accessible green spaces such as community gardens that provide opportunities for contribution and connection. In addition to this, home gardens offer places of personal expression and inspiration, and engender feelings of care. Thus engagement in both these types of setting and garden activity can offer benefits through the experience of the themes outlined in this study, producing a wide range of benefits for individuals, communities and the environment itself.

6.6.3 Policy Implications

Many policy based interventions and recommendations tend to be focused around promoting evidence-based actions (e.g. NEF, 2008) that are easy for the public to understand and engage with. Examples of public campaigns based on the UK government's public health policy include the '10,000 steps a day' campaign, or 'five a day' fruit and vegetables campaign, in which public physical wellbeing and health policy is promoted. When considering how spiritual wellbeing could be used in a similar campaign, the concept of using evidence-based actions seems challenging. Based on the findings from this study, spiritual wellbeing is identified as a process based around the development of relationships. As such, spiritual wellbeing requires the inclusion of An-Other, meaning that it is difficult to achieve alone. This is primarily because you are unable to control the free will of the An-Other and the other party in the relationship is free to leave at any time. In terms of gardening however, this issue

is less problematic. As Nature is not an independent body in the sense of having free will, spiritual wellbeing could be developed through this relationship via the efforts of one party. Consequently, guidance and advice can be given to help highlight ways in which spiritual wellbeing can be developed through this relationship.

Therefore, a key policy recommendation from this study is the inclusion of 'access to a personal garden space' as a quality of life indicator. This study suggests that community gardens should not be viewed as the primary gardening opportunity and that whilst there is a role for gardening support groups, the option to garden alone should be prioritised. Access to a personal garden space in which one plays an active role has high importance and may offer benefits beyond those that can be offered through parks and shared natural spaces. This study proposes that there is a human need for access to personal garden space which one can build a connection to, contribute to the development of, and express oneself within. Whilst there are clearly many steps between having access to outside space and experiencing the spiritual wellbeing benefits from gardening in that space, having access helps to begin that journey. Therefore the recommended provision of garden space on new build properties would provide the setting and as such begin the process for individuals to develop their wellbeing through contact with nature. It is important to note however that in this study not all gardeners experienced tending a garden as supportive of spiritual wellbeing. Counter narratives given in this study highlight the fact that there are many pathways to spiritual wellbeing with a personal garden being but one of them.

In addition to the implications raised above there needs to be some consideration in terms of how issues such as spiritual wellbeing are currently and can potentially be discussed as part of government policy. Whilst recent governments have focused on wellbeing as a key political issue this may just be reflective of current trends and as such susceptible to being replaced with the next in vogue debate. It may also be increasingly difficult to begin the discussion around spiritual wellbeing at a political level as the very concepts of spiritual and wellbeing themselves are perceived in a way

that may be counterproductive to political debate. As discussed previously the concept of 'spiritual' in particular is difficult to define and includes and reflects of a wide range of perspectives. To begin to focus government and political attention on a concept such as spiritual wellbeing therefore requires a considerable conceptual shift into the unknown. Such a discussion would need to acknowledge societal and individual concerns beyond material gain and include aspects of life that are immeasurable. To address the issues raised in this thesis at a policy level requires political debates to take place around a topic that is not even be fully defined or understood by a large proportion of the population. As such, considerable work needs to take place to examine the ways in which we can begin to discuss concepts such as spiritual wellbeing at a policy level. This thesis provides some steps towards this by offering a new definition of spiritual wellbeing, and thus providing a concrete concept on which debates can begin to take place.

6.6.4 Practical Implications

Practical recommendations to enhance spiritual wellbeing through gardening or interaction with nature focus on the key themes and highlight the processes by which they could be supported. This could include being more aware of the nature world, connecting and contributing to nature or expressing oneself through natural activities.

The overarching premise of these practical activities would be to see nature as other to and part of oneself. A beginning step in the process of developing spiritual wellbeing through nature interaction would be the establishment of nearby natural spaces. This increased awareness of local nature spaces or the contents of one's garden, begins to highlight the garden and nature as a feature in our lives. Once awareness has been raised this could be supported through promotion of the garden as an extension of the home and consequently the plants and animals therein as extension of one's family. This increased awareness and sense of connection helps to recognise nature's ability to be the 'other' in our lives. An important practical implication of this study is the realisation that nature can play a greater role than is commonly perceived of as an external environment. The role of nature can go beyond the aesthetic and actually

hold an integral part as the 'An-Other' in our lives. Issues that may be faced here however, are perhaps focused around the ownership of natural spaces. With individuals feeling a close personal connection to communal areas such as gardens, public bodies in stewardship of such spaces, e.g., The National Trust, may struggle to manage and meet the range of individual encounters and expectations. Consequently due to the increasingly limited communal natural spaces, such a close and personal relationship with nature may only be truly experienced in a space one has autonomy over.

The practical implications of this identified relationship between humans and nature could be quite positive for individuals struggling to form human relationships. There are many individuals who may have low levels of overall wellbeing for whom NEF's five ways model is impractical. For example, for individuals who may be grieving, struggling with confidence or suffering from panic and anxiety, engagement with others may be a challenge. This study suggests that engaging with nature offers a non-challenging environment in which to develop a meaningful relationship. Gardening offers an opportunity to engage with something other than oneself without having to engage with other people. Consequently, the human-nature relationship may offer a first step in supporting individuals to engage with others and form new positive relationships.

6.6.5 Theoretical Implications

In terms of developing spiritual wellbeing theory, the findings from this study propose a reconsideration of the terminology used. Due to the varying settings in which spiritual wellbeing may be discussed e.g. politically, publicly, academically, a range of terminology may be required to ensure that it is more clearly understood and better supported. A range of phraseology around spiritual wellbeing would help to address issues around its clarity. In terms of academic phraseology the definition given in this study is useful as it is encompassing of a range of models and theoretical stances. As suggested by participants in terms of public engagement, terms such as 'holistic wellbeing' or the 'human spirit' were both suggested as potential new phrases to express spiritual wellbeing more fully. Such terms have potential to reflect the

interrelated aspect of spiritual wellbeing with the physical, mental and social dimensions. The 'human spirit' was also put forward as a potential term to express spiritual wellbeing as it was thought by participants to be representative of and understood by all people. In this context the word 'spirit' was expressed as all-encompassing and as such understood beyond the confines of religion and faith and as such addresses the difficulties encountered with the word spiritual. Thus the definition of spiritual wellbeing used in this study helps to also begin a conversation about the components of the phrase.

In terms of overall wellbeing models this study adds a new aspect to wellbeing, that being the role of An-Other. Whilst most wellbeing models highlight the beneficial role of relationships, other wellbeing dimensions highlight other people as the 'An-Other'. This study proposes that nature can fill that role. The theoretical implications of this are that such a stance highlights further the interrelated existence of human and nature. Identifying nature as a potential other in human lives gives nature extensive added value. The theoretical implications of this are that potentially nature becomes a central strand of the wellbeing debate. This central framing of nature in theoretical understandings of wellbeing also has practical implications in terms of nature provision, accessibility, management and care.

6.7 Strengths and Limitations of the research

6.7.1 Strengths

One of the strengths of the research undertaken was the open nature by which the data surrounding the definition of spiritual wellbeing was collected. By asking participants to define the concept themselves, the data collected provided a transparent and authentic account of their understanding. In addition to this, by taking into account the stories given by participants regarding spiritual wellbeing, a greater depth of understanding was developed and a variety of experiences were included. The story coding analysis was also beneficial as it allowed for the findings to be mapped against the lived experience of the participants. This approach allowed for the

study findings to move beyond the realm of abstract theory and highlighted the way in which spiritual wellbeing forms part of participants' everyday lives.

The strengths of the research also included the range of garden settings, which included both community and home gardens. This provided an overview of a variety of gardeners and highlighted the spiritual wellbeing benefits that could be experienced by individuals who did not have access to a garden.

The focus on reflection throughout this study has also been one of its strengths. Reflection on the topic, the data, the processes and the research outcomes have all helped to support a rounded and transparent study. These reflections have not only supported and developed the study, but have also provided valuable learning opportunities in terms of personal development. Consequently the strengths of this study may be further evident in future research, in which the lessons learnt and reflected upon here could be utilised.

6.7.2 Limitations

One of the primary limitations of this study lies in the definition of spiritual wellbeing. As the concept is lacking a formal definition it proved difficult to begin to structure the data collection without a shared concept between the researcher and participants of what was being explored. The literature review provided some working definitions to better understand the constituent parts of the phrase 'spiritual wellbeing'. Whilst these definitions were not given to participants and thus did not influence their understanding of the term, (which could be perceived as a strength) the interpretation of

Researcher reflection - In an attempt to gather as much high quality data as possible I interviewed too many participants. Collecting only qualitative data in phase two highlighted this, as the study became very data heavy. The vast amount of data to code and analyse may have resulted in priority being given to the more obvious themes. This has taught me useful lessons in terms of the value of counter perspectives and highlighted that in terms of quality and quantity, sometimes less is more.

the findings was influenced by those initial definitions. For example, a focus on the relationship with Other as a reflection of the term 'spiritual' taken from Schroeder (1992) is apparent.

This was partially mediated by attempting to bracket out my personal understanding by focusing solely on the participants responses during the interviews and taking a reflective, iterative approach (Smith et al., 2009). However, no social research takes place in a vacuum and as such, all interpretations reflect prior understandings to some extent. It is a clear limitation that without these definitions in mind the interpretations of the data may have been different.

In terms of participant samples, there were a number of issues that reflect the limitations of the research. Firstly, in social research it can be difficult to create clear-cut categorisations of diverse individuals. This is reflected primarily in terms of community and home gardeners. Phase One sought community gardeners whilst Phase Two sought home gardeners to take part in the research. However, during the study, it became apparent that some of the community gardeners also gardened at home (3/9) and some of the home gardeners also took part in community gardens (5/25). Therefore, whilst the categories are primarily reflective of the targeted sample groups, some comments made by participants did reflect this diversity. This could have been addressed by asking participants to think solely of their community or home gardens but this approach also causes issues. Firstly, as demographic data were collected at the end of the interview it did not become apparent in some cases that they gardened in multiple locations until after the interview. Secondly, it can sometimes be difficult for participants to parse out similar experiences and identify the subtleties between them, (as this is part of the research analysis process). Given this, a lack of clarification of the garden settings may have still been an issue. Finally the lack of demographic data collected in terms of socioeconomic status and ethnicity prevented a clearer overview of the sample of participants. Socioeconomic data may have helped to identify issues of affordability in gardening and discussions, for

example, regarding rental properties and garden ownership; whilst demographic data regarding ethnicity may have shed more light on any differing cultural perspectives.

Another limitation of the sample population is its lack of demographic diversity. Due to the use of snowball sampling and limitations on time and resources, the sample contained similar participants, in terms of gender, age and ethnicity. This issue was mitigated to some extent in Phase Two in terms of purposive sampling to ensure that (despite a majority of female participants) a range of genders and ages were reflected. As a result, caution must be taken with the findings as they are reflective of a narrow population.

The analysis approach utilised in this study also caused tensions and limited the depth of the information drawn from the data. By using thematic analysis as the main analysis approach the focus for the study centred on cross case analysis. This focus was useful in helping to explore the phenomenon as whole but created tensions between the themes and the more idiographic perspectives. Some of these perspectives were further explored in the outliers sections of the study, but this unfortunately reduced this data to being identified as a counter perspective as opposed to identifying its uniqueness. The narrative analysis offered a way to combine both the themes identified in the data and the idiographic perspectives but unfortunately this form of analysis played a minor role in the thesis. An Interpretative Phenomenological Approach (Smith et al., 2009) to analysis would have been useful in this study as it would have helped to explore the idiographic perspectives more fully. Despite this due to the sample size, thematic analysis was the chosen as the most appropriate tool.

One of the more general limitations includes the fact that participants were prompted to discuss spiritual wellbeing in relation to their gardening activities. Whilst participants used gardening analogies to express the key themes unprompted, it cannot be denied that the overall discussions took place in the context of gardening and as such reflect that focus. Therefore, whilst other settings and activities supportive of spiritual wellbeing could be raised by participants, the focus on gardening perhaps skewed their responses to use examples from that setting. Whilst this reflects the

study focus it perhaps prevented a wider understanding of spiritual wellbeing being identified.

6.8 Directions for future research

The outcomes of this study point to a range of fields in which future research could be beneficial.

In terms of spiritual wellbeing, further research with regard to its definition and conceptualisation amongst a variety of populations would be illuminating. In the process of the development of wellbeing frameworks there are often a number of stakeholder groups that are consulted in terms of how they phrase, interpret, and value key terms (Carnegie UK, 2015; The Wales We Want, 2016). Many now take a bottom-up approach and this could also be implemented in terms of spiritual wellbeing. Instances of spiritual wellbeing are often difficult to identify. Thus in order to understand such experiences beyond gardening, it may be beneficial to assess current wellbeing frameworks to identify what is missing. This could be achieved in future research by asking participants to outline what is good in their lives and looking for how/where these aspects are reflected in current wellbeing models. The aspects not represented may suggest another dimension of wellbeing as yet undefined, which may reflect spiritual wellbeing or something else entirely. Such an approach helps to identify and outline additional dimensions of wellbeing, thus creating a shared understanding. Once this understanding is achieved then the new dimension of wellbeing can begin to be placed in current wellbeing frameworks and associated with practical activities that may help to develop it (as per the NEF five ways to wellbeing model 2008). Once the features of this new dimension of wellbeing have been identified and its role in the current wellbeing spectrum outlined, then conversation can begin about how best it could be phrased. Previous research into spiritual wellbeing however appears to start from a top down approach and as such initial definitions create substantial research difficulties. Following the above approach may help to begin to provide some solutions to the problem of definition.

Consideration of the proposed feedback element of spiritual wellbeing may help to outline practical ways in which it could be supported throughout one's life. The feedback element suggests that as is the case with physical, mental and social aspects, individuals also have a degree of control over the spiritual dimension of wellbeing. Due to the lack of clarity around the term 'spiritual' and its perceived links to religion, spiritual wellbeing may be perceived as something you either have or don't have, as opposed to something that can be developed. Such data may help to develop evidence-based recommendations, similar to those advocated by NEF, that are specifically related to spiritual wellbeing.

In terms of gardening and nature interaction, it could be valuable to undertake research to better understand what is different or special about activities where nature provides the An-Other as opposed to activities where people are the An-Other. Such research would be particularly illuminating as it may help to outline the defining characteristics of nature when perceived as An-Other. Further research in this area could help to identify additional aspects of the human-nature relationship that prove beneficial to spiritual wellbeing, thus further developing those fields of inquiry. Also, in terms of specifically building on this study it may be beneficial to identify whether the the themes identified are evident in other nature-based activities or whether there are other themes identifiable. Potential research in this area could therefore investigate further the generalisability of the themes identified in this study across differing settings, as outlined in Figure 6.6

Figure 6.6: Possible Conceptual Model – considerations for future research

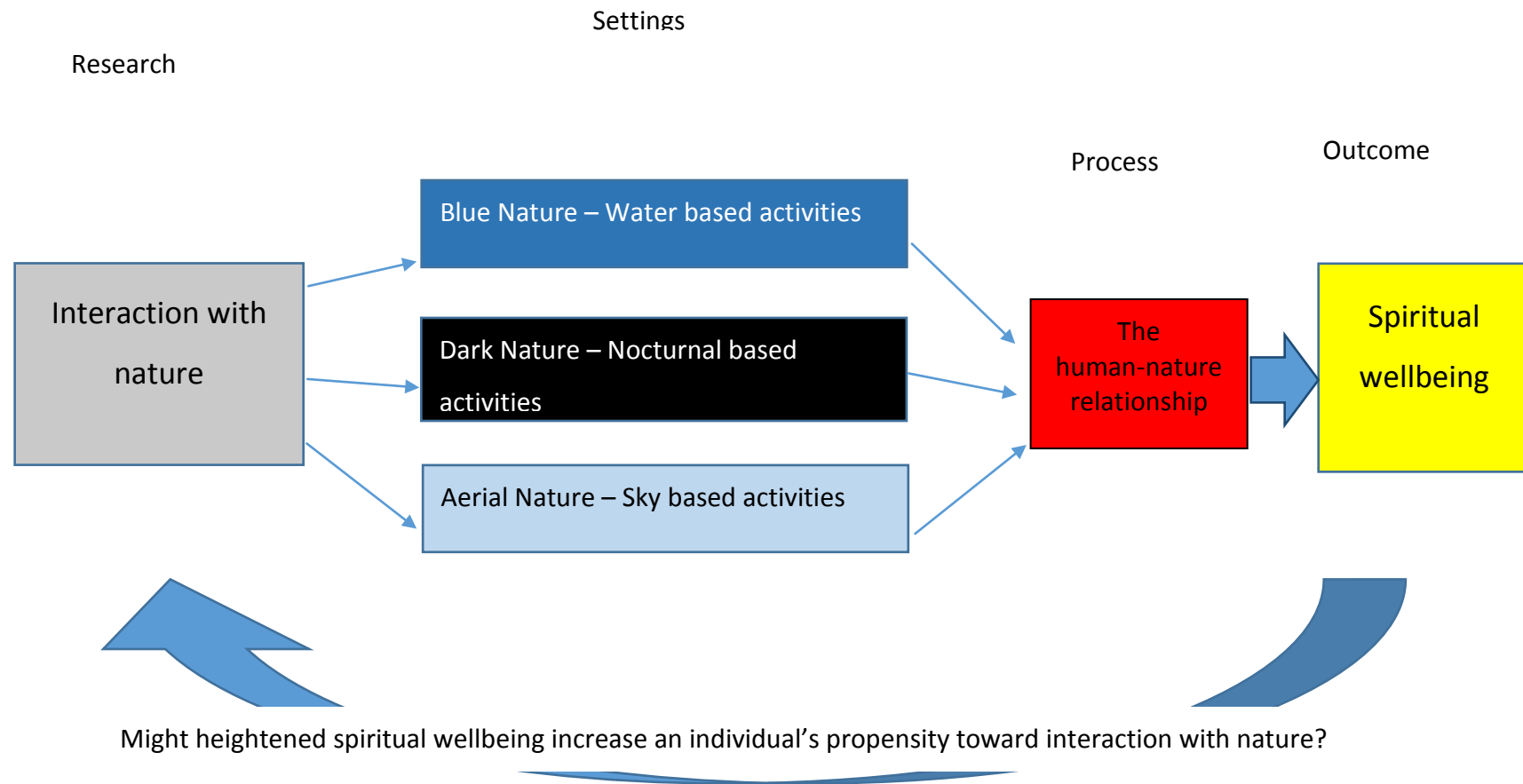


Figure 6.6 outlines some potential directions that future studies in this field could take. Working from left to right the diagram outlines possible focuses of future studies as consistent with this study. Future research could take into account a much wider range of nature interaction settings and activities such as those that take place at night, as preliminarily investigated in this study. Whilst “blue nature” has been investigated in terms of general wellbeing (Depledge & Bird, 2009), “Aerial nature” activities such as flying and skydiving have received little to no research attention from the perspective of nature interaction and wellbeing. By addressing this wider range of activities, a greater understanding of the specific features of each setting could be more clearly identified and explored in terms of their potential effects on spiritual wellbeing.

Moving across the diagram, the process by which these activities could develop spiritual wellbeing forms the crux of a study. This box currently outlines the human-nature relationship and proposes that future research explores whether this relationship exists in alternate settings, and if so, whether the themes from this study are evident in other settings. The final box highlighting the concept of spiritual wellbeing may be identified as something very different to that as conceptualised by gardeners. Potentially, the most interesting aspect of this conceptual model is the addition of a feedback arrow linking spiritual wellbeing to interaction with nature. This arrow suggests that future studies could usefully investigate the feedback aspect further by exploring whether enhanced spiritual wellbeing will increase a propensity toward interaction with nature.

6.9 Conclusions

The data as analysed in this study suggests that spiritual wellbeing can be developed through interaction with nature during gardening activity. This conclusion is based on the fact that gardening offers a human-nature relationship in which there are opportunities to develop and engage with the spiritual wellbeing themes outlined by participants. This study concludes that gardening in a range of settings helps to develop spiritual wellbeing. In community gardens, it can be developed via a sense of connection to others through

the development of human relationships and a sense of contribution built through engagement in a shared endeavour. In home gardens, it can be developed by providing a meaningful relationship with An-Other (that being nature) in which the themes of Connection, Contribution, Awareness and Being Self can be expressed. This deeper understanding of the human-nature relationship highlights the role that nature can play in supporting and developing spiritual wellbeing.

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Appendices

Appendix A: Participation consent form (Phase one)

Hello, Thank you for your interest in the Dig for Health project. The information below explains a little more about the study and your potential role in it. If you are willing to take part, please sign the consent form and return it to Rebecca Bell. If you have any further questions please contact Rebecca (details below).

What are the aims and objectives of the project?

The main aim of the project is to better understand the gardening experience. Questions may be asked regarding your involvement in gardening activity and your thoughts about the experience. The project is being undertaken by Rebecca Bell a PhD student based at De Montfort University (DMU) in Leicester. The project is funded through a DMU scholarship.

What will I be expected to do?

You may be asked to contribute to the data by taking part in all or some of the following things: answering survey questions, taking part in group or individual discussions about gardening and wellbeing, completing a very short diary or log of your gardening experiences. Some of these encounters may be audio recorded and we may ask to take photographs of your garden.

What will happen to the data you collect?

All data collected from you will be anonymised and stored securely and confidentially at DMU in line with the Data Protection Act (1998). All data will be kept confidential and anonymised so that no individual participant is identifiable. Some of the anonymised data may be used for publication or presentation at National and International conferences.

What if I decide to drop out?

We understand that people's circumstances and interests change; if at any point you decide that you no longer want to take part in the study please notify Rebecca. However, even short contributions to the study provide value, so please don't be deterred from taking part in the first instance. Your input and help would be very much appreciated.

Who do I contact if I have any further questions?

The primary contact for this project is Rebecca Bell and you can contact her at rebecca.bell4@email.dmu.ac.uk. If you would like to speak to someone other than Rebecca you may contact her supervisor for this project Dr. Katherine N Irvine (kirvine@dmu.ac.uk).

I (Print name) agree to take part in the above study.

Signed..... Date.....

Researcher..... Date.....

Appendix B: CNS* and positive emotions tick box survey (Phase one)

Please answer each of questions in terms of *the way you generally feel*. There are no right or wrong answers. Using the following scale, in the space provided next to each these question simply state as honestly and candidly as you can what you are presently

1	2	3	4	5
Strongly disagree		Neutral		Strongly agree
___1.	I often feel a sense of oneness with the natural world around me.			
___2.	I think of the natural world as a community to which I belong.			
___3.	I recognize and appreciate the intelligence of other living organisms.			
___4.	I often feel disconnected from nature.			
___5.	When I think of my life, I imagine myself to be part of a larger cyclical process of living.			
___6.	I often feel a kinship with animals and plants.			
___7.	I feel as though I belong to the Earth as equally as it belongs to me.			
___8.	I have a deep understanding of how my actions affect the natural world.			
___9.	I often feel part of the web of life.			
___10.	I feel that all inhabitants of Earth, human, and nonhuman, share a common 'life force'.			
___11.	Like a tree can be part of a forest, I feel embedded within the broader natural world.			
___12.	When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature.			
___13.	I often feel like I am only a small part of the natural world around me, and that I am no more important than the grass on the ground or the birds in the trees.			
___14.	My personal welfare is independent of the welfare of the natural world.			

experiencing.

*CNS Scale taken from - Mayer, F.S. and Frantz, C.M., 2004. The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of environmental psychology*, 24(4), pp.503-515.

Please tick which of the following emotions you experience on a regular basis:

Joy		Pride	
Gratitude		Amusement	
Serenity		Inspiration	

Interest		Awe	
Hope		Love	

Appendix C: Interview schedule (Phase one)

Question Schedule for Leicester Gardeners July/Aug 2013 (RESPONDENTS DO NOT VIEW THIS FORM).

Name: _____ **Age:** _____ **Sex: M/F**

Faith: _____ **Employed/Unemployed/Part**
time/Student/Homemaker

Size and type of garden:

Do you also work on any other gardens than your own (allotments/communal plots)?

Is the garden based at your Home or somewhere else?

The Gardener

1. How long have you had this garden? (P)
2. Which is your favourite part of the garden? Why is this? (P)
3. How long have you been gardening? (P)
4. How did you learn to garden? (Prac/P)
5. How important is it to you to have a garden in your life? (P)
6. How important is it to you that you own that garden? (P)
7. Do you think of yourself as a gardener? Have you always thought of yourself this way? (P)

The Garden

8. What is the main purpose of your garden? (P)
9. On average how many hours a week do you spend in your garden during the growing season? (Prac)
10. Does anyone help you with the gardening? (SV)

11. If you do the majority of the work, how important is it to you that you do the practical work in your garden? Why is this? (SV/Prac/C)
12. What do you do with any produce or flowers that you grow? (Prac)
13. If you grow food, how much money do you think you save each year by growing your own? (P).
14. Approximately how much money do you spend on your garden per year? (Prac)

The link between gardener and garden

15. Do you consider gardening to be a spiritual act? Can you please give me an example? (P)
16. How do you feel when plants don't grow or do well? Whose fault is it? (N)
17. How do you feel when plants do well? Whose success is it? (N)
18. Do you feel like you are working with nature or against nature when you are gardening? (C, N)
19. Are you at all concerned with what others think of your garden (neighbours etc.) (P)
20. What is special to you about gardening? (All)

Researcher notes

Questions are clustered into 5 categories designed to meet the five main themes that have arisen from the literature so far. These themes are:

- Gardening as a personal venture. (P)
- Gardening as a social venture. (S)
- Gardening as a form of control (C)
- Gardening as a practical measure. (Prac)
- Gardening as a link to Nature (also measured by CNS) (N)

Appendix D: Participant information and consent form (Phase two)

Thank you for your interest in the Dig for Health project. The project is being undertaken by Rebecca Bell a PhD student based at De Montfort University (DMU) in Leicester. The information below explains a little more about the study and your potential role in it. If you are willing to take part, please sign the consent form and return it to Rebecca Bell. If you have any further questions please contact Rebecca (details below).

What are the aims and objectives of the project?

The Dig for Health project is a research study seeking to understand the benefits of gardening. The following questions have been designed to draw on your personal gardening experiences and the role that the garden and gardening plays in your life. Please feel free to recount your stories and experiences in detail as there is no right or wrong answer to the questions. The interview should take approximately one hour. With your permission the interview will be audio recorded. There is also the opportunity to take part in a diary task over the course of the summer, which will ask you to consider your gardening experiences in more detail. Please notify Rebecca if you are interested in taking part in this.

What will happen to the data you collect?

All data collected from you will be anonymised and stored securely and confidentially at DMU in line with the Data Protection Act (1998). All data will be kept confidential and anonymised so that no individual participant is identifiable. Some of the anonymised data may be used for publication or presentation at National and International conferences.

What if I decide to drop out?

We understand that people's circumstances and interests change; if at any point you decide that you no longer want to take part in the study please notify Rebecca. However, even short contributions to the study provide value, so please don't be deterred from taking part in the first instance. Your input and help would be very much appreciated.

Who do I contact if I have any further questions?

The primary contact for this project is Rebecca Bell and you can contact her at rebecca.bell4@email.dmu.ac.uk. If you would like to speak to someone other than Rebecca you may contact her supervisor for this project Dr. Andrew Reeves (areeves@dmu.ac.uk).

I (Print name) agree to take part in the above study.

Signed..... Date.....

Researcher..... Date.....

Appendix E: Interview Schedule (Phase two)

1. When did you first start gardening and why?
 - What would you say is your favourite activity? Why is this?
 - What is your favourite season? Why?
2. Would you consider gardening to be a 'job to be done' or a 'labour of love'? Why?
Can you give me an example of your experience of this?
3. Do you prefer gardening alone or with others? Why is this?
4. To what extent does gardening provide an escape from the stresses of everyday life for you?
5. Considering the following quote from another gardener, (GIVE QUOTE CARD No.1).
'Gardening connects me to something larger than myself' To what extent is this reflective of your experiences?
6. When you are gardening do you feel that you are working with or against nature?
Why is this?
7. Compared to other outdoor activities what is special about gardening for you?
8. Some people liken caring for a garden to caring for a pet, in terms of watering, feeding, tending etc. To what extent would you agree or disagree with this? Can you give an example?
9. What role has gardening played during difficult times in your life? For example during illness or injury?
10. What do you think about whilst gardening?
 - Do you ever lose track of time?

11. Considering the following quote from another gardener (GIVE QUOTE CARD No.2) 'I hate to feel rushed when gardening, I like to soak it all up and allow my mind to wander'.

To what extent do you feel this way? (IF ANSWERS POSITIVELY) Which gardening activities support this feeling for you?

12. Do you ever experience positive emotions whilst gardening such as Hope, Gratitude or Joy?

13. To what extent do you feel gardening reflects your personal values or strengths? Can you give me any examples? For example generosity, patience

14. How do you think you would feel if you didn't have access to a garden?

15. Considering the following quote (GIVE QUOTE CARD No.3) 'Gardening helps me find purpose in my life'

To what extent do you feel this way? Is there any other word in your life that you would replace gardening with?

16. Part of the Dig for Health project is based on understanding the role of spiritual wellbeing in gardening. There are lots of different views about what constitutes SpWB. How would you describe SpWB?

16a. Now with your description in mind please consider the ways in which you feel your garden/gardening develops or detracts from your spiritual wellbeing. (If unable to give a description think of aspects of gardening that may help to verbalise what SpWB might mean to you.)

17. In summary how would you describe the benefits of gardening to someone who has never done any gardening before?

18. Is there anything else you would like to tell me about your gardening experiences?

Thank you for your time/Give voucher.

Appendix F: Participant Demographic form (Phase two)

Participant details

Please complete the following questionnaire.

1. Age Prefer not to say ☐

2. I identify my gender as..... Prefer not to say ☐

3. Roughly how long have you been gardening?

4. I am a: (Please tick all that apply)

- ☐ Community gardener
- ☐ Allotment gardener
- ☐ Home gardener
- ☐ Other type of gardener (please describe)
- ☐ Prefer not to say

5. I mostly grow: (Please tick all that apply)

- ☐ Vegetables
- ☐ Fruit
- ☐ Flowers
- ☐ Herbs
- ☐ Other (please describe)
- ☐ Prefer not to say

6. I consider myself to be: (Please tick all that apply)

- ☐ A religious person
- ☐ A spiritual person
- ☐ Other (please describe)
- ☐ Prefer not to say.

Thank you for your time and your participation in the project.

Appendix G: Gardening codes and Spiritual wellbeing themes merged (Phase two) - Analysis of the gardening

NVivo codes and the spiritual wellbeing themes in tandem - codes classed as 'yes' reflective of Spiritual wellbeing

Node	Themes that apply to code	SpWB Y/LR/U?	Why?
Anthropomorphising Nature, talking to plants	Cont, Conn & AW	Y	Care & Consideration of things other than self.
Awareness and Noticing	Cont & AW	Y	Awareness of Other
Care for and commitment to garden	Cont, Conn, AW & BS	Y	Consideration and care for other.
Connectedness	Cont, Conn & AW	Y	Awareness and Sense of place.
Cooking and eating produce	Cont, Conn & BS	Y	Deep engaging link to natural processes. Sense of self sustainability
Creative	Cont, Conn & BS	Y	Activity that allows for expression of self.
Cyclical	Cont, Conn & AW	Y	Connection to greater cycles
Distraction and Distance from other concerns	Cont, AW & BS	Y	Removal from the everyday - escape.
Empathy	Cont, Conn, AW & BS	Y	Awareness and consideration of Other
Engaging with the space	Cont, Conn, AW & BS	Y	Engagement helps with awareness of Other.
Environmental	Cont, Conn, AW & BS	Y	Awareness of natural world
Garden as other	Cont, Conn, AW & BS	Y	Awareness of the importance of something other than self, deep relationship to natural environment.
Garden as valued space	Cont, Conn, AW & BS	Y	Awareness of the importance of something other than self, deep relationship to natural environment.
Gratitude	Cont, Conn & AW	Y	Appreciation
Growth	Cont, Conn & AW	Y	Awareness of natural processes
Health	Cont, Conn, AW & BS	Y	Reflects the two-way relationship not just good for nature but people too. Physical and mental WB more explicitly referred too but SpWB alluded too.
Gardening perceived as beneficial	-	-	SUBSET OF HEALTH
Interest	Cont, Conn, AW & BS	Y	Indicates Passion and interest in life.
Interrelated	Cont, Conn, AW & BS	Y	Awareness of cycles of connection.
Investment	Cont, Conn, AW & BS	Y	Awareness of passage of time.

Knowing own space	Cont, AW & BS	Y	Connection to space, deep relationship to natural world.
Learning	Cont, Conn, AW & BS	Y	Personal development, being self, following passions.
Life purpose	Cont, Conn, AW & BS	Y	Awareness of life role and purpose.
Memory space	Cont, Conn, AW & BS	Y	Connection to and Awareness of life cycle.
Natural knowledge	Cont, Conn, AW & BS	Y	Awareness of natural cycles.
Nature time, Precious	Cont, Conn & AW	Y	Awareness and appreciation of cyclical processes.
Nurturing	Cont, Conn, AW & BS	Y	Connection to and care for and commitment to something greater than self.
Passing of time, cycle of garden.	Cont, Conn & AW	Y	Awareness of cycles, greater things than self.
Perspective	Cont, Conn, AW & BS	Y	Awareness of sense of self in relation to wider processes.
Positive Emotions	Cont, Conn, AW & BS	Y	Help to develop appreciation for and awareness of positive things in life.
Muted Positive Emotions	-	-	SUBSET OF POSITIVE EMOTIONS
Process	Cont, Conn, AW & BS	Y	Investment in things greater than self, commitment to a process.
Relationship to garden	Cont, Conn, AW & BS	Y	Deep connection to natural world.
Seasons	Cont, Conn & AW	Y	Awareness of cycles, related to beauty, being outdoors etc.
Senses	Cont, Conn, AW & BS	Y	Awareness of thing other than the obvious, smells, touch etc.
Smell	-	-	SUBSET OF SENSES
Sharing, generosity	Cont, Conn, AW & BS	Y	Consideration and concern for others.
Sharing space positive	Cont, Conn, AW & BS	Y	Connection to others in positive way.
Sharing space with nature	Cont, Conn, AW & BS	Y	Connection to natural space, awareness of roles.
Stewardship	Cont, Conn, AW & BS	Y	Care for and connection to something greater than self, contribution.
Thinking through, rumination	Cont, Conn, AW & BS	Y	Taking time for Consideration of things,
Transportive Otherness	Cont, Conn, AW & BS	Y	connection to and awareness of something greater than self through direct personal experiences. .
Unity, working in partnership with nature	Cont, Conn, AW & BS	Y	Connection and contribution to something greater than self.
Wildlife	Cont, Conn, AW & BS	Y	Deep relationship to something other.

Appendix G: Gardening codes and Spiritual wellbeing themes merged (Phase two) - Analysis of the gardening NVivo codes and the spiritual wellbeing themes in tandem – codes classed as ‘Less Reflective’ of Spiritual wellbeing.

Node	Themes that apply to code	SpWB Y/LR/U?	Why?
Ageing	Conn & AW	LR	Reflects consideration about cycle of life.
Balance	AW & BS	LR	Awareness of wholeness/richness of life's different features
Beauty	AW	LR	Appreciation of natural environment/ things bigger than self.
Being alone	AW & BS	LR	Taking time to be alone, contentment at being alone, inner peace.
Being outside	AW	LR	Connection with natural world
Childhood	Conn, AW & BS	LR	Consideration of cycle of life, passage of time.
Doing easier than being	AW & BS	LR	Gardening trait, not necessarily conducive to SpWB.
Escape	AW & BS	LR	Removal from the everyday, respite for self, taking time to explore self.
Focus and Flow	AW & BS	LR	Losing oneself in activity, removal from every day, restorative
Getting dirty	Conn & BS	LR	Deep connection with natural world
Indoor plants	Conn, AW & BS	LR	Practical nature of plant keeping.
Loneliness	AW & BS	LR	Talk about not being lonely in garden, connection to other.
Materialism	AW & BS	LR	Comments about how SpWB is not reflected in Materialism.
Negative emotions	AW & BS	LR	This is the opposite of positive emotions to show that these also occur during gardening activity. These do show balance in life though...
Non-gardeners	AW & BS	LR	Often used to reflect the values of gardeners by showing the values of non-gardeners.
Other natural spaces	AW & BS	LR	Awareness of natural world.
Parents shared activity	Conn, AW & BS	LR	Awareness of life cycle, connection to past, relationship to others.
Patience	AW & BS	LR	SpWB less about immediate satisfaction but investment in processes.
Perseverance	AW & BS	LR	Shows resiliency and fortitude which may help with coping.
Personal space, activity time	AW & BS	LR	Being self, chance to express self.

Appendix G: Gardening codes and Spiritual wellbeing themes merged (Phase two) - Analysis of the gardening NVivo codes and the spiritual wellbeing themes in tandem – codes classed as ‘Less Reflective’ of Spiritual wellbeing. (Continued).

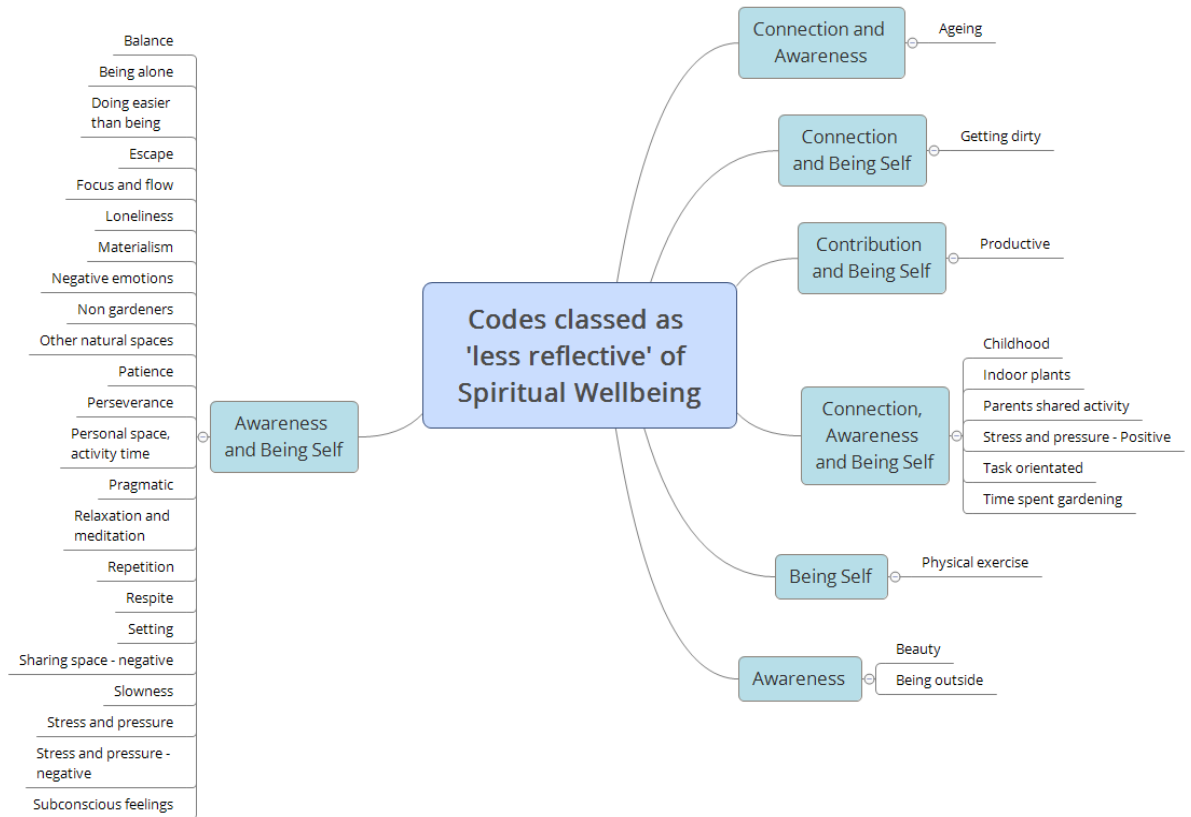
Node	Themes that could apply to code	SpWB Y/LR/U?	Why?
Physical Exercise	BS	LR	More about wholeness and wellbeing in general.
Pragmatic	AW & BS	LR	Coping mechanism, awareness of lack of control over all aspects of life.
Productive	Cont & BS	LR	This is not necessarily important to all. PART OF THE RELATIONSHIP DIFFICULTIES CATEGORY
Relaxation and meditation	AW & BS	LR	Being self, self-care and taking time for self, respite.
Repetition	AW & BS	LR	More about consistency and relaxing process of gardening.
Respite	AW & BS	LR	Escape from everyday concerns, self-care.
Setting	AW & BS	LR	More about physical space proximity etc.
Sharing space negative	AW & BS	LR	More about practicalities of dealing with others, sharing tools, borders between gardens etc., not about sharing space with nature or wildlife.
Slowness	AW & BS	LR	Patience, not rushing through helps with awareness?
Stress and Pressure	AW & BS	LR	General comments about life stress.
Stress and Pressure - Negative	AW & BS	LR	Gardening can create stress and pressure in life.
Stress and Pressure - positive	Cont, AW & BS	LR	Gardening doesn't create stress and pressure, (discussed in a pragmatic way not in a therapeutic way). PART OF THE RELATIONSHIP DIFFICULTIES CATEGORY
Subconscious feelings	AW & BS	LR	SpWB not always directly acknowledged as occurring.
Task Oriented	Cont, AW & BS	LR	Nature of gardeners and managing space, slightly about being self but more about how to practically keep on top of jobs. PART OF THE RELATIONSHIP DIFFICULTIES CATEGORY
Time spent gardening	Cont, AW & BS	LR	Not always in balance, indicates passion but not necessarily SpWB. PART OF THE RELATIONSHIP DIFFICULTIES CATEGORY
Urban spaces	-	-	SUBSET OF OTHER NATURAL SPACES

Appendix G: Gardening codes and Spiritual wellbeing themes merged (Phase two) - Analysis of the gardening NVivo codes and the spiritual wellbeing themes in tandem – codes classed as ‘Unsure’ of Spiritual wellbeing

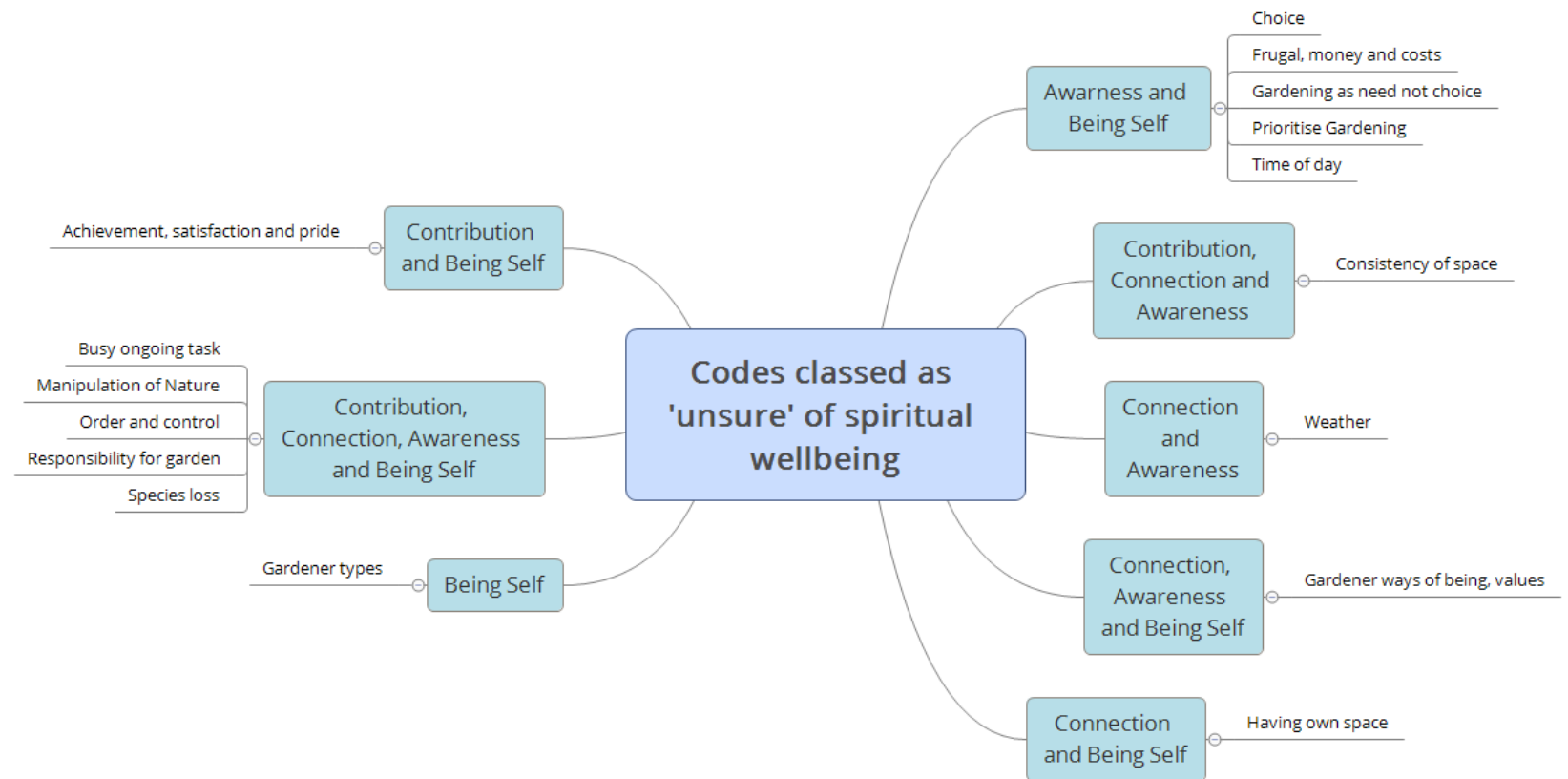
Node	Themes that could apply to code	SpWB Y/LR/U?	Why?
Achievement, Satisfaction and Pride	Cont & BS	U	More about wholeness?
Busy ongoing task	Cont, Conn, AW & BS	U	More about distraction? But does indicate focus, attention to detail?
Choice	AW & BS	U	Not obvious but some respondents reported SpWB is about having the freedom to pursue goals that make your spirit happy.
Consistency of space	Cont, Conn & AW	U	Connection to place, relationship with place
Frugal, money and costs	AW & BS	U	Respondents stated that SpWB is not about materialism.
Gardener types	BS	U	Some of the priorities expressed by gardeners reflect SpWB, such as care, nurturing etc.
Gardener ways of being, values	Conn, AW & BS	U	some of the values expressed support SpWB, such as patience, generosity etc.
Gardening as need not choice	AW & BS	U	connection as a need, shows passion, commitment, care.
Having own space	Conn & BS	U	Reflection of being self, Ownership?
Manipulation of Nature	Cont, Conn, AW & BS	U	Problems with practical nature of garden, respondents not always happy with this but see it as necessity - PART OF RELATIONSHIP DIFFICULTIES CATEGORY
Order and Control	Cont, Conn, AW & BS	U	This is about the wrangling nature of the relationship with nature - PART OF RELATIONSHIP DIFFICULTIES CATEGORY.
Prioritise Gardening	AW & BS	U	Show how big a role gardening plays in day to day life and possibility life purpose but was often referred to in a jokey way as opposed to seriously.
Responsibility for garden	Cont, Conn, AW & BS	U	More about ownership and expectations - PART OF RELATIONSHIP DIFFICULTIES CATEGORY
seeing a difference	-	-	SUBSET OF ACHIEVEMENT SATISFACTION AND PRIDE
Species loss	Cont, Conn, AW & BS	U	shows awareness but more about practical concern -dealt more with inability to help situation - not life enhancing PART OF RELATIONSHIP DIFFICULTIES CATEGORY.
Time of Day	AW & BS	U	Awareness of natural world but also practical nature of gardening and priorities
Weather	Conn & AW	U	Awareness of natural processes, quite practical but often associate with beauty and connection.

Anomalies shown in yellow – Gardening codes that include Contribution as a key theme, but are not necessarily considered conducive to spiritual wellbeing.

Appendices H: Mindmap of less reflective codes against spiritual wellbeing themes.



Appendix I: Mindmap of unsure codes against spiritual wellbeing themes.



Appendix J:

Table 1 shows the spiritual wellbeing data and faith based demographic data and Table 2 shows the spiritual wellbeing data merged into themes to give an overview of respondents' answers.

Table 1: Spiritual wellbeing question data put into faith based demographic data categories.

Participants faith affiliations based on demographic data	Participant number	Answer given in response to spiritual wellbeing question	Themes taken from the stories given in response to the spiritual wellbeing question.	Semantics	Any other comments
1. Religious	None of the participants stated that they were solely Religious (only Religious and Spiritual).				
2. Spiritual	2	Feeling at one with things Peace in yourself and surroundings. Getting a feedback.	Folk Dancing – Transcendence, touch/Physicality, history, unity, being part of something larger.	<i>I can't describe it... I don't know... (Confusion) I mean...I think that... almost... (Lack of clarity) don't you... does that make sense? (Reassurance)</i>	none
	7	A sense of inner peace that is not as a result of anything material.	Being in garden – provides balance to busy life through stillness, personal space, inspiration, tranquillity. Shut the rest of the world out. Being alone to work things through.	<i>Spiritual wellbeing?</i> Respondent gave lots of agreement with me trying to clarify, 'mmm and uh uh's'	None

	11	Being aware of your place in the world or your place in nature.	No story	None	None
	14	Having done your bit. Obligation to others in the world. An awareness of things beyond you.	Being in the allotment and being in church- Allotment provides sense of creation in real sense when things are growing. Contentment, achievement, feeling in touch with things around you, physicality. Connectedness. Church sermon provides opposite of SpWB, allotment more real. When allotment failing church provides SpWB	<i>I sometimes think... (Non-committal) it's more real somehow... (difficulty expressing)</i>	None
	15	Living naturally and like communally. Being happy with your place in nature and respecting it.	Other religions – Native Indian mentality, it's not a dog eat dog world. Openness, contribution and connection. Take care of nature. Open to things like religious experience.	Lots of broken sentences	Stated that this was something they had clear view on – had been Buddhist.
	19	To feel at peace with one's place in the cosmos. To feel at peace with one's place in nature, feeling connected to this bigger thing, this greater energy.	Being peaceful, understanding and accepting, being tolerant and sensitive to other creatures. To feel compassion for all of nature and oneself. Sensitivity, compassion, connectedness and support.	<i>Gosh these are all wide questions... what are you asking me? ...</i>	We had discussed Spirituality at length throughout the interview and this was a summary of

			Gardening and SPWB – Physicality and touching the earth helps. Having a space of one's own to be still and feel nourishment.		those feelings.
	20	Being provided with the opportunities and freedom to live the way that best suits us.	Gave the opposite of SpWB to demonstrate what SpWB is to them. Lack of SpWB makes the soul suffer, spirits don't thrive and then physical and mental health suffer to. Being forced into situations that aren't right for you. Gardening more about SpWB than physical health as it can sometimes damage your physical health.	<i>It's tricky...</i>	
	22	Not to do with religion. It's a peace a personal peace. Being part of the greater thing. Being at ease with your thoughts.	Good to question your role in the world and your place in nature – contemplate. Being connected to the greater everything. Gardening allows you to make a contribution to nature. Provides a peaceful place and a sense of achievement.	<i>I'm not very good with words...</i>	None
	23	It's yourself that makes you...The things that you do around you that make you	Positive emotions from nature, wonder, beauty, probably help with SPWB. Happiest when in the garden	<i>Explain a bit more to me what you mean by SpWB? ... Oh dear this is making me sound awful now! (Perception that you should be</i>	Doesn't really feel SpWB and struggled to

		happy.	so it's all connected. Perception that people with religion have SpWB, not something you can identify with if not religious.	aware of SpWB.)	identify it.
	25	Transcends mental and physical wellbeing, more intangible. A harmony of physical and mental at their peak gives you something more. SPWB more than the sum of its parts. No control over SPWB	Could describe instances of SpWB but struggled to define it. Being outdoors in the countryside, or creative activities, never had SpWB in urban envt. It's not necessarily something you can put your finger on. A focus a clearness of thought of mind. Not something you can recreate.	<i>I'd probably struggle to give you a really clear definition of what it is, but I've got an idea of what I think it is.... I'm trying to think of a word to describe it...</i>	SpWB seen as a precious thing that happens only occasionally, can't be permanent or created.
3. Other	8	Redefined SPWB as human spirit. Nature is one of the things that can enhance the human spirit.	Working own piece of land – nature amazing and miraculous, humbling and impressive. Own piece of land offers different SpWB through your input into process. Connection with one piece of land, improving, enhancing a place, contribution.	Quite non-committal, lots of ... <i>for some people... for me...</i> etc. not wanting to be representative of anyone's views but their own.	Spiritual very loaded term, uncomfortable using it.
	9	Having the sense of the whole of existence. (Awareness) Nature is God.	Religious discussion – Existence is the spiritual rationale or the spiritual dimension of existence. Sense of continuity, looking after	None.	Wanted to make it clear they had no religious convictions.

			other things is part of that existence.		
	10	<p>Feeling alive, welcoming each day.</p> <p>Feeling internally happy.</p> <p>An inner pot of wellness that combines lots of things, multiple aspects.</p> <p>Being Whole.</p>	<p>Walk in France/Choir/Garden – Connection, being part of something, Achievement, transcendence, positive emotions, and unity.</p>	<p>Losing track of concept of SPWB.</p> <p><i>I'm sorry I'm not doing this very well, but I'm trying to be honest you see...</i></p> <p><i>This is all terribly boring and pretentious... (Need to be genuine) ... I think... That sounds completely bonkers... (Embarrassment at emotional language?) I suppose it would be... I don't know... (Uncertainty) isn't it? (reassurance)</i></p>	<p>Personally redefining the concept. Refers to <i>Spirit/Wellness of happiness</i> as opposed to SPWB.</p> <p>Religion aside to being an atheist.</p>
	12	To feel at peace.	<p>Spirituality and nature – Garden is like a shrine nature as parallel to religious spirituality. Something natural and not man made is conducive to SpWB. TV not Spiritual. Nature is uplifting and fascinating.</p>	None.	<p>Weather may affect SpWB in garden, less SpWB in rain.</p>
	13	<p>Can mean many things to many different people.</p> <p>Being in a good mental state.</p> <p>Being connected to the</p>	<p>SpWB and gardening –Gardening provides meditative state that helps to connect you with nature and environment.</p>	<p><i>That's a very deep questions for a Tuesday night! ... (Things like this should be discussed at a less mundane time?) I feel like I'm being tested... (Thinks there is</i></p>	

		environment in a happy way. Doing what you want without harming others. Achieving what you want to achieve.		right and wrong answer).	
	17	Feeling in tune with nature. Being part of wider creation. Emotional wellbeing.	Church services link you to the creator type stuff, feeling part of creation important. Happiness – positive emotions in the garden, part of creation. Memory café – Spiritual do'er not being contemplative but doing things, contribution and purpose, being part of it all.	None	Wasn't really open to discussions about Spirituality at beginning of interview but by this question had formed an answer.
	24	Being content in yourself.	Not religious based at all, more about contentment, contribution, getting out what you put in to life. SpWB is yourself, who you are, how you feel inside. If you have SpWB it's because you are happy. Can't force it or buy it, materialism and wanting is the opposite of it.	<i>If you can make head or tail of that....</i> (Feels like not been very clear)	Thinks SpWB is opposite to religion, can't pray and get SPWB.
4. Prefer not to say	1	SPWB may help those who are handicapped to allow	Alton Towers – It's not material values that make you happy. Pleasure can be got out of what you do not	<i>I would find it a bit difficult... (Difficulty expressing)</i>	Problems with word spiritual. Plants have souls

		<p>them to be happier.</p> <p>Sharing values</p>	<p>what you buy.</p> <p>Connection to others and making friends, learning and sharing. History, developing an understanding of plant's needs, nurturing.</p>		<p>etc. a 'little bit over the top'.</p>
5. Could not Answer					
6. Left blank	4	<p>Being happy with family That's the most important thing for me (<i>implies SPWB is a summary of what the most important thing is for you</i>)</p> <p>Everything combined, multiple aspects.</p>	<p>Transcendence, goes beyond what we can understand.</p> <p>Nature cycle – offers sense of connectedness. Cycle of life.</p> <p>Too big to process.</p> <p>Trip to Malaysia – familiarity, comfort, understanding.</p>	<p><i>I think... I just sort of feel like... (uncertainty)</i></p> <p>A few broken and unfinished sentences.</p>	<p>Religion aside to lack of faith.</p>
	6	<p>If you're in touch with nature then you're sorted... don't worry about it more than that.</p> <p>A connection between you and the earth. A two-way appreciation.</p>	<p>Working with children in gardening – if they can appreciate it, being open to experience. Can be a spiritual thing good for mental and physical health.</p> <p>Primeval forest – Might provide</p>	<p><i>I'm not doing very well at describing this at all...Phew!...maybe... couldn't it?...I don't know really...To an extent I guess.... I feel kind of slightly... I'm not sure what to say...</i></p> <p>Lots of broken sentences, pauses</p>	<p>Concern about the term spirituality and nature being hijacked by groups in terms of spirituality (ref. Pagans).</p>

		Something that bypasses people (Unconscious thing) and they would be better with it really.	deeper spiritual meaning, ancient wild spaces deemed more spiritual. 'I want to go and feel that almost,... see if it something that kind of exists'	etc.	
7. Religious and spiritual	3	<p>If you feel that you have the right kind of relationship with whichever higher being you believe in.</p> <p>To feel content with whatever I was feeling.</p>	<p>Visiting churches – Feeling a need for something spiritual, very emotional in churches discontent with spiritual wellbeing feels confused by it.</p> <p>Wonder of growing process – miraculous, makes me believe I think there's more likely to be a god.</p>	<p><i>Oh Crikey! ... (Fear) If you're talking about... (Confusion) I assume that.... I think you disagree with me there don't you? ... You think... (Reassurance?)</i></p>	Sense of feeling like needing to work on SpWB, a need or want for SpWB. SpWB seen as something achievable that can be attained.
	16	Being able to see yourself in a bigger context. Seeing yourself as part of a bigger whole and being integrated into that. Having a purpose and a reason for being there. Multiple aspects make up SpWB. Connectedness, purpose, contribution.	Gardening and SpWB – Not the main way of getting SPWB, gives a sense of being part of nature, working for good, something positive produced. Achievement, goals, nature partnership. Wonder, beauty and excitement at things growing. It (Spiritual feelings) only happens odd times not a continual thing.	<i>What do I mean by SPWB? (Uncertainty)</i>	None
	18	A conversation with God.	Gardening and SPWB – Provides space and time for contemplation	That's a bit of a tricky question...	Respondent is religious and

		Contemplation. Relating the seen and the unseen.	which is important in SpWB. To process thoughts and feelings. Connectedness to people who have died through garden – link to them through process and plants.		made reference immediately to formal religion.
	21	Life isn't about things and money Love and faith and hope A journey with god	Talk on Spirituality – loving, receptive, joyful, hopeful, self-sacrificial, connection, sharing.	Asks more questions (Consideration). ... <i>Isn't that interesting? That probably doesn't answer...Mmm (Uncertainty) I guess, Aspects of... (Non-committal)</i>	none
8. Religious and other	5	A feeling of tranquillity and an ability to cope with life's ups and downs. Having a spiritual base.	Being able to cope when things are traumatic. Gardening helps with SpWB as where feels most relaxed and themselves, provides personal space.	<i>Spiritual wellbeing?...It probably links in with...(uncertainty) I find it quite hard to pinpoint answers like that...</i>	Very short answer, respondent is religious.

Table 2: SpWB question data put into themes.

Faith affiliation based on demographic data	Participant number	Answer to spiritual wellbeing question	Themes highlighted in the 'story' part of their answer to the spiritual wellbeing question.	Any other comments
1. Religious	None of the participants stated that they were solely Religious (only Religious and Spiritual).			
2. Spiritual	2	Being yourself Outliers	Being part of something Openness Connectedness	None
	7	Being yourself What it's not - money	Personal Space SpWB feelings	None
	11	Awareness Connectedness	No story	None
	14	Contribution and purpose	Being part of something. Connectedness.	None

		Awareness	What it's not – not necessarily religion	
	15	Connectedness Being yourself	Openness Connectedness Contribution	Stated that this was something they had clear view on – had been Buddhist.
	19	Being yourself Connectedness	Connectedness Being part of something Personal space	Discussed Spirituality at length throughout the interview.
	20	Being yourself	What it's not - Being forced into situations that aren't right for you.	None
	22	What it's not. Being yourself. Contribution and purpose.	Openness Connectedness Being part of something Personal space	None
	23	Being yourself	Positive emotions Wholeness	Doesn't really feel SpWB and struggled to identify it.

			Outliers- only religious people have SpWB. Difficult to relate to.	
	25	What it isn't – one thing, multiple features.	Connectedness – primarily to nature Openness Personal space	SpWB seen as a precious thing that happens only occasionally, can't be permanent or created.
3. Other	8	Connectedness – primarily to nature	Personal space Connectedness – primarily to nature Being part of something.	Spiritual very loaded term, uncomfortable using it.
	9	Awareness Connectedness – primarily to nature	Connectedness Being part of something	Wanted to make it clear they had no religious convictions.
	10	Vitality Being yourself Wholeness	Connectedness Being part of something Openness	Personally redefining the concept. <i>Spirit/Wellness of happiness</i> as opposed to SPWB. Religion aside to being an atheist.

	12	Being yourself	What it's not – man made things Connectedness – to nature primarily.	Weather may affect SpWb in garden, less SpWB in rain.
	13	Multiple features Connectedness – to nature primarily. What it's not – harming others. Being yourself.	Personal space Connectedness – to nature.	
	17	Connectedness to nature. Contribution and purpose	Connectedness to other Positive emotions Being part of something	Wasn't really open to discussions about Spirituality at beginning of interview but by this question had formed an answer.
	24	Being yourself.	What it's not – religion, materialism, can buy SpWB. Being part of something. Being yourself.	Thinks SpWB is opposite to religion, can't pray and get SPWB.
4. Prefer not to say	1	Outliers –SpWB something for disabled people/those suffering.	What it's not - materialism	Problems with word spiritual. Plants have souls etc. a 'little bit over the top'.

		Connectedness to people.	Connectedness – to people.	
5. Could not Answer				
6. Left blank	4	Connectedness – to people Happiness Multiple aspects	Transcendence. Connectedness. Cycle of life. Too big to process. Being part of something.	Religion aside to lack of faith.
	6	Connectedness –to nature Outliers – an unconscious thing.	Openness Connectedness Outliers – SpWB more likely in wilderness areas.	Concern about the term spirituality and nature being hijacked by groups in terms of spirituality (ref. Pagans).
7. Religious and spiritual	3	Connectedness to other Being yourself	Outliers – feels a need for SpWB. Openness	A need or want for SpWB. SpWB seen as something achievable that can be attained.
	16	Connectedness Contribution and purpose Multiple aspects	Being part of something Openness	None

			Outliers – SpWB not a continual thing.	
	18	Religion Awareness Outliers - Relating the seen and the unseen.	Personal space Connectedness	Respondent is religious and made reference immediately to formal religion.
	21	What it isn't – money and things. Religion	Connectedness Being part of something.	none
8. Religious and other	5	Spiritual base Being yourself	Personal space	Very short answer, respondent is religious.

Appendix K: Story Coding Framework (Phase two)

Q1: When does this story occur? (*past, present, future*)

Q2: Where does this story occur? (*location/setting*)

Q3: Who or what is involved in the story? Nature? garden? respondent? others? (*key characters*)

Q4: What happens? (*brief overview*)

Q5: What are the key characters roles? (*carer, dependent*)

Q6: What types of emotions or feelings does this story reflect? (*loss, wonder*)

Q7: What appears to be the purpose of this story? (*To show...*)

Q8: What appears to be key theme of the story? (*Look at themes collated from data*)